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MEDICAL JOURNAL
OF AUSTRALIA

(With which "The Australasian Medical Gazette," and "The Australian Medical Journal" are incorporated.)

The Journal of the Australian Branches of the British Medical Association.

VOL. II.—4TH YEAR—No. 23.

SYDNEY: SATURDAY, DECEMBER 8, 1917.

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No. 23.

RINGWORM AND ALLIED PARASITIC SKIN DISEASES IN AUSTRALIA.

By Henry Priestley, M.D.

(From the Australian Institute of Tropical Medicine, Townsville.)

Although parasitic skin diseases are not uncommon in Australia, little has been published as to the causative organisms. W. J. Munro (*Australian Medical Gazette*, 1907, p. 509) mentions the occurrence of a microsporum and of a large spored trichophyton in cases of ringworm.

N. Paul (*The Medical Journal of Australia*, 1916, Vol. 1, p. 237) examined thirty-four cases of ringworm of the scalp in Sydney, and found microsporum (*M. audouini*, *M. lanosum* and *M. felineum*) in fourteen, and endothrix trichophyton (*T. crateriforme*

The parasitic fungi causing ringworm in man belong to four genera, *Trichophyton*, *Microsporum*, *Epidermophyton* and *Achorion*.

The fungi belonging to the genus *Epidermophyton* grow superficially on the skin, but do not attack hair and hair follicles. They cause the disease known as "dhubie itch."

The fungi of the genera *Trichophyton*, *Microsporum* and *Achorion* attack both skin and hairs and hair follicles, but there is a group of the genus *Trichophyton* which does not attack the hair.

The achorions and many of the trichophytons are pyogenic, the microspora are doubtfully so, and the epidermophytons are not pyogenic. In Table I. is given a summary of the appearance in the lesions of the fungi of the four genera. Each of the genera

Table I.

		<i>Microsporum.</i>	<i>Trichophyton.</i>	<i>Epidermophyton.</i>	<i>Achorion.</i>
Lesions	Ringworm	Large, very few healthy hairs in affected area	Smaller; number of healthy hairs	Large	Favus
	Hairs	Long, with greyish sheath extending 3 to 4 mm. from the skin	Short	Never affected	Long. Dusty grey
	Infection of smooth skin	Not common	Common	Always	Common
Parasitic Life	Mycelial spores	Spores small round not in chains, but forming irregular mosaic on surface of hair; never within hairs	Spores large and round or square, regular and in chains within hairs in endothrix group; small or large round, in chains within and around hairs in ectoendothrix group	—	Spores polymorphic inside hairs; no chains of spores around hairs
	Mycelium in skin squames	Mycelium not rectilinear, but curved in different planes; lateral protuberances frequent; very few transverse septa visible	Mycelium generally rectilinear; mycelial elements short, sometimes oval, then in sinuous curves	Mycelium very polymorphic, consisting of regular quadrangular or oval elements, usually rectilinear	Mycelial filaments composed of elements of irregular length in sinuous curves, separated by a mucilaginous material

and *T. acuminatum*) in nineteen and an ectothrix trichophyton in one case.

In Townsville fifteen cases of ringworm of the scalp and body due to an endothrix trichophyton (*T. sulfureum*), two cases of ringworm of the body due to a microsporum (*M. scorteum*), two cases of *tinea interdigitalis* due to a trichophyton (new species), and one case of onychomycosis due to a trichophyton (*T. griseum*), besides several cases from New Guinea, have been examined.

Favus has been reported on two occasions in human beings in Australia, and by J. B. Cleland in mice.

English text books give few details of the methods of investigation of the parasites of ringworm and an account of the procedure of examination of infected hairs and skin scales, and the methods of cultivation of the parasites may be useful.

contain numerous species which are more or less distinct. Somewhere about fifty species of the genus trichophyton, twenty of the genus microsporum, five of the genus epidermophyton and five of the genus achorion are known to produce disease in man. The trichophytons are divided by Sabouraud into four main divisions depending on the position and size of their mycelial spores in relation to the hairs. These are:—

- (1) *Endothrix*—spores entirely within the hairs.
- (2) *Neoendothrix*—spores almost exclusively within hairs but a few outside.
- (3) *Ectoendothrix microides*—small spores within and around the hairs.
- (4) *Ectoendothrix megasporae*—large spores within and around the hairs.

There is also another group of trichophytions which do not affect the hair but grow exclusively in the skin squames.

The microsporums and the achorions are divided into those of human and those of animal origin, and in each case the two groups differ markedly in the effects produced and culturally.

Methods of Examination.

It is usually recommended to treat the affected hairs or skin squames with 40% potash in order to clear them for microscopical examination. While in many cases this procedure is useful, it is a rather severe treatment, and subsequent staining of the preparation is difficult or impossible.

The use of lactophenol or chloral-lactophenol for clearing can be highly recommended. These substances clear as well or better than the potash, and do not injure the specimen in any way. For permanent preparations the slides may be ringed with some cement or lute, or the clearing agent may be washed out and the preparation stained.

Lactophenol consists of—

Lactic acid	1 gm.
Phenol, pure	1 gm.
Glycerine	2 gm.
Distilled water	1 gm.

Chloral-lactophenol is—

Chloral hydrate cryst. .. .	2 parts by weight
Pure lactic acid	1 part
Phenol cryst.	1 part

For stained preparations the best results are obtained by the use of Sahli's borax methylene blue. The skin squames or hairs are treated with chloroform, to remove fat, boiled for two to three minutes with formic acid, washed for a few minutes in water, and stained with Sahli's methylene blue, washed, differentiated with alcohol if necessary, dehydrated and mounted in balsam.

Gram's method, or its modifications, although more frequently used, does not give such good results.

Methods of Cultivation of the Parasite.

The composition of the medium has a considerable influence on the appearance of growths of parasitic fungi, and the same organism may give entirely different colonies on two different media. For this reason it is advisable to use a standard medium for cultures, and Sabouraud's maltose agar is, for many reasons, the best suited for this purpose. For purposes of differentiation Sabouraud's glucose agar and potato are often of use.

Most of the parasitic fungi grow readily on maltose agar, but one often has to inoculate a large number of tubes in order to obtain a pure culture. Infected hairs, which may with advantage be divided into a number of small pieces, or portions of skin squames are seeded on to the surface of tubes of maltose agar, four or five pieces to a tube, and at least six tubes used. The inoculated tubes are kept at room temperature, and after three, four or more days small downy tufts will be noticed in the successful inoculations. These continue to grow at a greater or less rate, but usually take five or six weeks to reach their maximum development. The appearance of the cultures of the different species differs considerably. Many are white in colour, some coloured red, violet, yellow, etc. The surfaces may be moist looking or chalky, or covered

with a more or less thick down or duvet. Some have a regular surface, in others the surface is crateriform, in others extremely irregular. The microsporums of animal origin grow most rapidly, the achorions of human origin are very slow growers, and the colonies never become large.

In Table II. is given a summary of the cultural reactions and morphological characters of typical members of the different groups.

The morphology of the parasites cannot be satisfactorily studied from preparations of growths on solid media. For this purpose cultures are made in hanging drops of glucose peptone water, and the progress can readily be observed microscopically. For permanent preparations these hanging drop cultures are dried, fixed for a second with pure acetic acid, washed in absolute alcohol, stained in 1 in 400 aqueous eosin, dehydrated and mounted in balsam.

Most species of parasitic fungi undergo a pleomorphic degeneration. After a certain number of weeks, on various points of the surface of the culture, small white tufts may be observed. If subcultures from these tufts are made, they are quite different from the original cultures, and usually appear as thick downy growths. Morphologically they show considerable differences from the original cultures, and have either no organs of reproduction (spores) or these are but little differentiated.

Morphological Characters of the Parasitic Fungi in Cultures.

Microsporum.—The growth consists of mycelium, consisting for the most part of rectilinear elements, with here and there swellings giving the so-called racket-shaped elements (Fig. 1). The ends of many of the hyphæ are more or less curved, and show short denticulations on one side, the so-called pectinate bodies (Fig. 5). The organs of reproduction are of three kinds: (a) lateral conidia, (b) fusiform or spindle-shaped spores, and (c) chlamydospores. The conidia are small oval bodies, 3 to 4 μ in length, growing as protuberances along certain hyphæ and at the terminations of these hyphæ. These hyphæ are usually simple and little branched (Fig. 4). The fusiform spores are large bodies, 30 to 60 μ long and 15 to 18 μ wide, which may or may not be divided by several septa. The surface of the free extremity is covered with short spines. These spores grow from the sides and ends of hyphæ. They are very numerous and well developed in the microsporums of animal origin (Fig. 3).

The chlamydospores appear as club-shaped swellings, 12 to 18 μ in length and 6 to 8 μ in breadth in certain of the hyphæ and at their terminations. These are thick-walled, resistant spores, and their contents are granular (Fig. 2).

Trichophyton.—The mycelium is similar to that in the microsporums, but the racket-shaped swellings only rarely appear. Pectinate bodies are not found, but in many of the trichophytions the ends of some of the mycelial hyphæ are twisted into spirals (Fig. 9). There are the same three types of organs of reproduction as in the microsporums.

The lateral conidia are more rounded than in the microsporums, and are supported on short sterigmata. The spore-bearing hyphæ, in many cases, are richly branched, forming grape-like masses of spores (Figs.

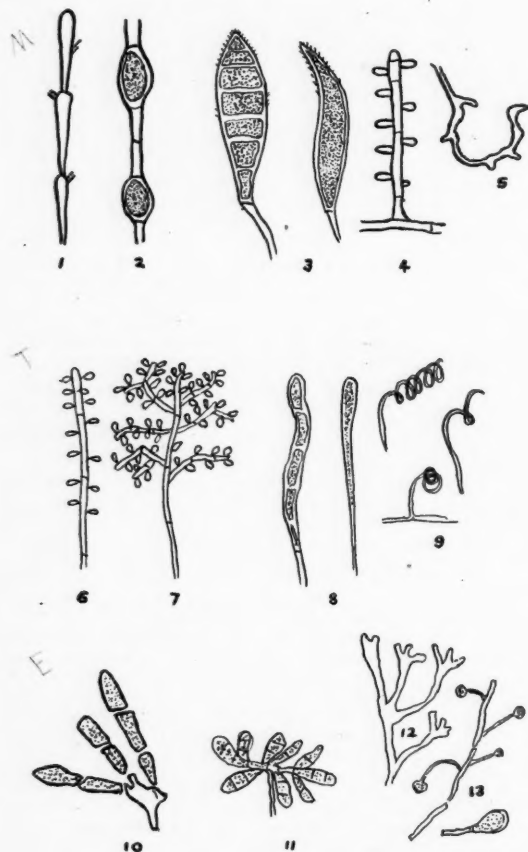
Table II.

	Microsporum	Trichophyton	Epidermophyton	Achorion		Type.	Rate of Growth.	Character of Growth.	Fusiform Spores.	Conidial Spores.	Mycellium.	Pectinate Hyphae.	Spirals.
	Microsporum of human origin					<i>M. audouinii</i>	Slow	Growth round, white, covered with short, greyish down (duvet); pleomorphism rare.	Very few; minute spurs on apex	Oval or truncated, sessile; not in bunches	Racket-shaped elements common	Common and well marked	—
	Microsporum of animal origin					<i>M. lanosum</i>	Rapid	Growth round, white, longer, down (duvet); pleomorphism always	Extremely numerous; minute spurs on apex	Ditto	Ditto	Ditto	—
	(1) Endothrix; spores entirely within hairs					<i>T. tonsurans</i> (<i>crateriforme</i>)	Slow	Growth elevated creamy white, surface powdery; pleomorphism well marked	Rudimentary	Round, on short sterigmata, in bunches of grapes	Regular	Absent	Absent
	(2) Neo-endothrix; few chains of spores outside hairs, most within hairs					<i>T. flavum</i> (<i>cerebriforme</i>)	Slow	Growth elevated, creamy white, surface powdery and very much folded	Rudimentary	Ditto	Regular	Absent	Absent
	(3) Ectoendothrix microides; small round spores within and around hairs					(a) <i>T. asteroides</i> (<i>gygiseum</i>); chalk-like growth	Rapid	Central umbo, numerous rays; surface powdery, chalk like, white	Well marked, smooth surface	Ditto	Regular	Absent	Well marked
	(4) Ectoendothrix megaspores; large round spores within and around hairs					(b) <i>T. niveum</i> ; downy growth	Rapid	Downy surface, longer or shorter peripheral rays	Absent	Round; short sterigmata; not in grape-like bunches	Regular	Absent	Absent
	(5) Not attacking hairs					(a) <i>T. equinum</i> ; velvety growth	Rapid	Velvety surface, white; on potato moist, yellow ochre coloured growth	Absent or rudimentary	Round, lateral buds on long hyphae	Regular	Absent	Absent
						(b) <i>T. ochraceum</i> ; faviform growth	Very slow	Growth of small ochre yellow tubercles; resembles achorion	Absent	Absent	Irregular	Absent	Absent
						<i>T. albicans</i>	Very slow	Whitish, with powdery surface	—	—	—	—	—
						<i>E. cruris</i>	Slow	Citron yellow growth, powdery surface; pleomorphism rapid	Very numerous; in groups like bunches of bananas	Absent	Regular	Absent	Absent
	Achorion of human favus					<i>A. schönleini</i>	Very slow	Growth yellowish white; resembles a piece of sponge	Slender and not septate	Irregular, pyriform, sessile, rare	Very, irregular	Very well marked	Absent
	Achorion of animal origin					<i>A. quinckeanum</i>	Rapid	White, downy growth	Fairly well differentiated	Resemble those of microsporum	Regular	Absent	Absent

6 and 7). The large fusiform spores are not so abundant as in the microsporums, and the surfaces are smooth (Fig. 8).

Chlamydospores are rare and of the same type as those in the microsporums.

Epidermophyton.—The morphology is quite distinct. There are no spirals, no pectinate bodies, no lateral conidia. There are very numerous multi-septate fusiform spores (Fig. 10), which are very fragile, and appear laterally on the mycelium and in irregular bunches of 5 to 10 at the ends of mycelial hyphæ, resembling in some ways bunches of bananas (Fig. 10). Chlamydospores also appear in old cultures.



Achorion.—In the achorions of human origin the mycelium is very irregular, and in slow-growing cultures there are numerous chlamydospores of various sizes. Lateral conidia are rare. Pectinate bodies may be well developed. There are two special structures among these achorions: (1) claviform bodies, (2) favus yellow bodies. The claviform bodies (Fig. 12) appear as claviform swellings at the ends of mycelial hyphæ, often in irregular bunches, giving the appearance of a chandelier. The favus yellow bodies (Fig. 13) are rounded or oval bodies situated at the ends of filaments, and are to be considered as terminal chlamydospores. In the achorions of animal origin

lateral conidia and multiseptate fusiform spores are well marked.

Parasitic Fungi Isolated in Townsville.

(1) *Trichophyton rubidum* (new species).—This parasite was isolated from skin squames of a soldier returned from Rabaul, who presented an extensive erythro-squamous eruption over both buttocks, the inguinal region, the lumbar region and the side of the neck. The lesion was in parts pustular. The parasite was abundant in the skin squames, and had the appearance of a trichophyton.

The fungus was characterized by the beautiful port wine tinted discolouration of the medium in a glucose agar culture. The growth itself was creamy white with a short duvet or down, and the medium under and around the colony was of a deep port wine colour, becoming almost black under the centre of the growth. Cultures on Sabouraud's maltose agar were of the same appearance, but there was no discolouration of the medium, and the central part of the colony was of citron colour. On ordinary nutrient agar the growth was slower, and the whole colony was yellow in colour, slightly reddish in the centre.

Pleomorphic degeneration appeared early, and was marked. Two types of pleomorphic growth were obtained. The more usual form was of the usual type obtained among the trichophytons, showing rapid growth of downy appearance. Glucose agar cultures of this form showed the same discolouration of the medium as in the normal form, but this only appeared after the colony had reached a considerable size, and had been growing for some weeks.

The other form of pleomorphic growth consisted of small buff-coloured, flattened colonies with no duvet, which never reached more than 1 cm. in diameter. Subcultures from this form would sometimes give the more usual form.

Morphologically the fungus showed numerous conidia, most often as lateral outgrowths from simple hyphæ, but grape-like masses were not uncommon. Very occasionally fusiform spores were seen, and these were not well developed. Nodular bodies were occasionally seen; chlamydospores were common in old cultures, and were often very irregular in form.

The first form of pleomorphic growth showed nothing beyond regular mycelium and, very occasionally, spore-bearing hyphæ.

In the second form of pleomorphic growth the mycelium was most irregular, consisting of ovoid, round or irregular elements, but no organs of reproduction were noticed.

Attempts to infect animals from cultures were unsuccessful, but a successful inoculation from a culture was made in a human being, an erythro-squamous patch of about 2 cm. diameter, with minute pustules resulting. Cultures were made from skin scales from this lesion, which was then cured by vigorous treatment with *tinct. iod.* No infected hairs could be found in the lesion.

This fungus differs from any of the trichophytons previously described, and the name *Trichophyton rubidum* (new species) is proposed for it.

2. *Trichophyton interdigitale* (new species).—This parasite was isolated from two cases of *tinea interdigitalis* and a case with a scaly circinate lesion in the groin. The fungus was abundant in the skin squames, but there was no infection of hairs. A growth of seventeen days on Sabouraud's agar was about 5 cm. in diameter. There was a small central boss obscured by duvet. The rest of the culture was covered with a well-marked duvet which was very distinct at the periphery. The central part of the culture was pale buff coloured, the surrounding parts white. There was no discolouration of the agar. On glucose agar there was a central boss surrounded by an area of light buff colour. This was surrounded by a ring of lighter shade, and the periphery was white. There was very little duvet on the glucose agar cultures, and the whole appearance of the surface suggested a piece of blotting paper. The agar under the growth was coloured chestnut brown, almost black in the centre and becoming yellowish towards the periphery.

On ordinary nutrient agar there was a flat white growth covered with medium duvet. On potato there was an abundant white growth with short duvet.

Pleomorphic degeneration appeared early. The pleomorphic cultures consisted of a plate of thick white duvet, and showed nothing characteristic. Microscopical examination showed numerous grape-like masses of conidia, fairly numerous, well-formed multiseptate, fusiform spores, and some spirals which became abundant in older cultures. There were no nodular bodies. In some old cultures chlamydospores were numerous.

The pleomorphic cultures showed complete degeneration, no organs of reproduction being seen.

Attempts to infect animals were unsuccessful.

This trichophyton appears to be closely allied to *T. laticolor* and *T. farinulentum*, but differs from these in several respects.

The name of *T. interdigitale* (new species) is proposed for this fungus.

Trichophyton griseum (Vasconcellos).—This parasite was isolated from a case of onychomycosis of the great toe.

It has been previously described from a circinate lesion on the arm of a patient in Brazil. It is characterized by the peculiar concentric arrangement of its cultures.

Trichophyton sulfureum (Colcott Fox).—This fungus was present in fifteen cases of ringworm of the scalp and various parts of the body. It is characterized by the sulphur yellow colour of its cultures. It is a typical member of the endothrix group.

Microsporum scorteum (Priestley).—This was isolated from a case of *tinea circinata* presenting two inflamed circular lesions on the leg. It is a typical microsporum of animal origin. It has been described elsewhere.

Epidermophyton cruris (Castellani).—This has been isolated from several cases of *tinea cruris*.

Reports of Cases.

SOME INTERESTING CASES.

By William T. Chenhall, M.D., F.R.C.S.,
Honorary Surgeon, Royal Hospital for Women, Sydney.

Large Ovarian Cyst.

Case I.—K.D., *act.* 79 years, a multipara with eight children, was admitted to the Royal Hospital for Women in June, 1917, suffering from an enormous enlargement of the abdomen. Many years ago a slight swelling was noticed in right lower quadrant of the abdomen. This had slowly but surely increased in size, gradually added to her discomfort, and, finally, so embarrassed her circulation and loaded her body as to render her incapable of effort, and enforced her to rest in bed.

The history suggested an ovarian origin, but ovarian tumours so filling the abdomen must be distinguished from all other large abdominal tumours, and the difficulty of precise diagnosis bears a definite ratio to the size of the mass. This arises from the difficulty of outlining any surrounding area of tympany, the absence of free space in which the tumour, under palpitation, may be moved about and the impossibility of demonstrating the existence of a pedicle or its position.

On palpitation and percussion I found a vast, dull area over the tumour, at its sides and extending down into the pelvis, but tympany was discernible far back in the flanks and under the lower ribs.

Vaginal examination revealed the presence of a tumour pressing on the pelvic floor. The uterus, except at its cervix, could not be defined.

Confirmation of the ovarian origin of the tumour was afforded by the characteristic "bossy" surface with evident fluctuation over a large area.

I believed the tumour to be a multilocular adenocystoma, with enormous enlargement of one cyst, which was spherical in form and which, by rotation and adaptation, had bulged the anterior abdominal wall. Yet it strongly simulated an unilocular ovarian cyst.

I have seen some curious cases of large parovarian cysts which, filling the abdomen and pelvis and, being irregular in form, closely simulated polycystic growth. This important fact should constantly be remembered in connexion with the differential diagnosis of large tumours.

Ascites demanded consideration, but there was an entire absence of "flat top" and "lateral bellying," such as is seen in a bladder half filled with water; this completes the characteristic picture of ascites occurring in a multipara with lax abdominal walls.

It has been rightly stated that a large ovarian cyst creates a characteristic form of abdomen. The distension occurs chiefly in the lower abdomen where the splinting of the walls over the tense sac occurs. The rise, from the pubes up to the point of greatest prominence is rarely so abrupt as is the case with large spherical myomata.

Another practical diagnostic point is that above the level of the greatest prominence the abdominal walls rise and fall with the respiratory movements. Again, a very large cyst usually so fills the flanks that they do not sag as in ascites, and the generally flattened cylindrical enlargement so characteristic of ascites, is absent.

Facies ovariana was not definitely expressed, presumably owing to the absence of severe emaciation.

Curiously, although pain had recently become almost unbearable and the weight oppressive, neither circulatory, respiratory nor excretory functions had been seriously impaired. The great weight of the mass and its increasing pendulosity compelled rest in a horizontal or inclined posture. Patient's appeal for relief prompted me to undertake the removal of so large a tumour from a woman of such mature age. The conditions of the circulation did not contraindicate anaesthesia, though I confess the case presented an anxious task; and the strength of her body and the relatively sound condition of her kidneys warranted hope for her ultimate recovery which, I am glad to report, has been complete.

The Operation: I first made an incision in the median line, about 10 cm. in length, hoping thus to tap the large cyst and reduce the ultimate length of my abdominal incision to the necessary minimum. Finding that the contents of the cyst would not run through the trochar and that the tumour was an extremely ponderous mass, I rapidly extended my incision to almost the full length of the abdomen, and carefully lifted the whole tumour intact upwards in order to explore the pedicle. I should estimate the mass at about 12 to 15 kilograms in weight. Fortunately, no adhesions were present. The abdomen was packed as the tumour was manipulated from its bed. A relatively small pedicle was easily secured, and the abdomen closed in layers.

Recovery was uninterrupted and the patient was able to walk at the end of the fourth week, when she left the hospital.

Commentary: This case presents some interesting and instructive features. Rarely is so large a tumour now seen. The patient's great age is interesting, but I have never seen age *per se* contra-indicate operation. During this year I operated upon a woman at the age of 82 years for a large urethral caruncle with considerable prolapse of the mucous membrane and constant bleeding. Excellent recovery resulted.

Howard Kelly reports two cases upon which he operated for ovarian cyst; one patient was 73, and the other 75 years of age.

The accompanying photograph, kindly taken for me by Mr. C. K. Furner, of St. Andrew's College, affords an excellent idea of the shape and size of the tumour, which measured 50 cm. in length and 35 cm. across at its wider end. I instructed that this rare specimen should be sent to Professor Welch for the University Museum, but owing to some error, delayed delivery allowed decomposition to occur. To Dr. Harrison great credit and my thanks are due for care and judgement in administering anaesthesia in this unique and anxious case.

Foreign Bodies in Abdomen.

Case II.—Bone Crochet Needle: B.B., aged 35 years, was sent to me by Dr. J. K. Freyer, of Orange. The history was brief. The patient, believing herself pregnant, became so utterly distracted that, after repeated attempts to induce abortion, she finally pushed a bone crochet needle into the uterus and caused considerable pain and some bleeding. She then consulted Dr. Freyer, who, believing her statement, and being unable to locate the needle, advised that she

should immediately proceed to Sydney for an X-ray examination. Slight uterine hæmorrhage continued. Pain in the lower abdomen was constant and severe, and the woman was greatly distressed on arrival at my consulting room nearly four days after the needle had disappeared from her hand.

Dr. J. G. Edwards obtained an X-ray picture, which afforded me an excellent guide in locating the foreign body.



The patient was immediately admitted to a private hospital, where, after preparation, and guided by the X-ray negative, I opened the abdomen in the middle line and easily found the foreign body, which I removed. It was almost entirely wrapped in a fold of omentum. Although the patient, having several times tried to pass each end of the needle into the uterus, apparently forced the handle through the fundus, it is difficult to explain what force or movement finally propelled the needle, with its

jagged end aft, through the uterus and set it free in the abdomen. An opening in the posterior wall of the uterus at its upper end was easily sutured. After closing the abdomen, I decided to dilate the uterine cervix and clear out the uterus. This was found to contain some blood clot and residual placental tissue, but the foetus could not be found. Recovery was uninterrupted and rapid.

Commentary: The result in this case endorses Dr. Freyer's prescience and judgement in affording his patient the advantages obtainable only by an X-ray examination. This procedure greatly simplified my work.

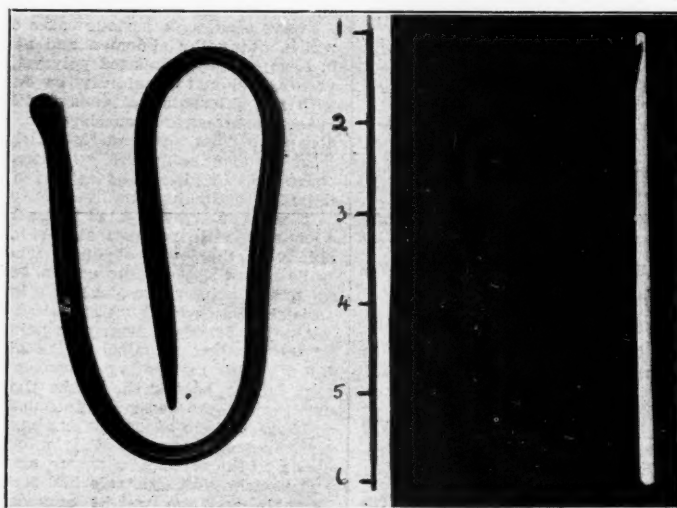
The next case will illustrate the difficulties which present in its absence.

I believe it to be sound practice first to secure the foreign body, then to close the uterine opening and then, with infinite care, to remove the uterine contents. There is no doubt that Dr. Freyer's prompt action saved his patient's life, or at least, saved her from great pain and profound danger, as the needle possessed

a large, rugged jag and was moderately sharp-pointed.

Case III.—Urethral Bougie: R.N., aged 28 years, single, was admitted to the Royal Hospital for Women under my care, suffering from very severe pain in the right lumbar and hypochondriac regions of the abdomen.

A satisfactory history was unobtainable, but it suggested that a catheter had been inserted into the uterus for the purpose of inducing abortion. The foetus had been expelled, but the instrument had disappeared. When I first saw the patient she was suffering considerable abdominal pain and



distension. The temperature was 39.5° C. and the pulse-rate 96. The vaginal discharge was blood-stained and offensive. The history so clearly pointed towards abortion, uterine perforation and the presence of the foreign body within the abdomen, that I decided upon immediate operation. Believing the foreign body to be of the usual catheter length, that is, about 30 cm., I assumed that one end of it might still be in the uterus or, as I had seen in another case, the whole foreign body might be coiled up in the organ. I therefore decided to explore the uterus. The patient was too ill to be moved for an X-ray examination, since no equipment exists in the hospital.

The uterus contained a large mass of offensive placental tissue, but the catheter could not be found. The abdomen was therefore opened medially, and presented a condition of acute peritoneal infection.

Deliberate search was made for the foreign body on the following plan, which is an extremely useful one, as was clearly demonstrated in this difficult case. The omentum was congested and held by soft plastic adhesions which were easily separated. I decided to avoid the use of abdominal packs. Beginning at the duodenum I followed the lamella of the first group of intestine to its base near the vertebral column, and then easily lifted up the entire bunch of intestines which lie under the left splenic flexure of the colon. The mesentery was then traced across the vertebral column to the right side, and the folds under the hepatic flexure of the colon were carefully unravelled, without success.

Beginning again at the spine, I next traced out the group of folds which lie in the left iliac fossa. Tracing the mesentery back to the spinal column, I next followed along the lamella, holding the group of intestines which usually fill the lower abdomen and the right iliac fossa. Here, folded up in a most remarkable manner on the right side of the abdomen lay the bougie in a pocket, the lateral border of which was formed by the medial line of the ascending colon. As I had found, upon opening the abdomen, the uterine wound on its posterior wall and lateral to the median line, it might be contended that I should at once have sought for the foreign body in that area. I have always found it advantageous in abdominal work to follow a definite plan and to work from the known to the presumably unknown anatomical point.

The catheter was found and removed within two minutes and with a minimum of intestinal disturbance. The wound in the uterus was sutured and the abdomen closed, after careful cleansing, without drainage. Recovery was uninterrupted.

Commentary: An X-ray examination would in this case, as in the previous one, have revealed the precise position of the bougie. In its absence the procedure followed proved correct. The most perplexing feature of this case was the displacement of such an instrument from the uterus to the abdominal cavity; and, still more perplexing, in view of the curious selective power of the omentum, that it showed no attachment, even to the sac or fold in which the foreign body lay.

Nephroptosis.

Case IV.—T.M., aged 53 years, married woman with three children, youngest being 24 years of age, was referred to me by Dr. Raymond Balls with a view to X-ray examination and operation.

The case presented many perplexing characters. He reduced his provisional diagnosis to a well-defined tumour mass in the right side of the abdomen, but remained in doubt as to whether it might be due to an enlarged gall-bladder containing calculi, faecal impaction in the ascending colon or an appendiceal abscess. The symptoms being against an appendiceal abscess he was inclined to favour the diagnosis of gall-stones. The further history elicited the fact that six days prior to my seeing her the patient had suffered a severe attack of "bilioousness." Nausea was distressing, but no vomiting occurred. Again, three days later she had been seized with sudden, very severe pain in the region of the mass two hours after eating a meal of lettuce salad. Her midday meal, five hours before, consisted of a grilled chop with some vegetable. No pain had followed the ingestion of that meal. She became feverish during the

night and suffered from a severe shivering attack. Prior to the "rigor," several attacks of hot flushes had occurred. She took a purgative dose of castor oil, which intensified the pain in the area of the swelling, but finally acted freely. In the general attack which occurred, the urine became scanty during a period of many hours. Later, a considerable amount of urine was passed, and relief followed.

An additional item of considerable interest in the history was then revealed. Twenty years ago a renal calculus had been removed from the left kidney, but the sinus had never closed, and periodically since that time small calculi had escaped through it. The opening is, at present, almost imperceptible. Except for slight retroversion of the uterus, the pelvic contents proved normal. No tenderness was felt over the epigastrium, nor over the normal areas of the liver and gall-bladder. The mass on the right side felt tender on deep palpation, and slight tympany was detected over its surface. An X-ray examination made by Dr. J. G. Edwards revealed a sclerotic change in the left kidney, with a suspicion of a small calculus lateral to the normal line of the ureter. On the right side, the result was negative for calculus.

I afterwards placed the patient on the Harvard couch and depressed the upper end to an inclined plane, when, under pressure, the mass moved up into the right kidney pouch. As previously, I had been unable to find the kidney in its normal position, although the patient was thin and spare and had lax abdominal walls, I clenched my diagnosis that the mass consisted of a movable, considerably hypertrophied, right kidney. Its development was clearly compensatory. Dr. Edwards, who had inclined his belief towards some growth, possibly a malignant one of the ascending colon, agreed with my view.

I then examined the patient in the erect posture. This will be found an excellent plan in differentiating between a ptosed kidney and a movable lobe of the liver, or a tensely filled gall-bladder, on the right side; and from an abnormally movable, enlarged spleen on the left side.

All clothing being freely loosened, I placed the patient close to a table so that, bending her body forwards from her hips, she rested her arms upon the table. Seated at the patient's side with one hand over the lumbar region posteriorly, and the other hand in a corresponding position in front of the kidney, one could carefully palpate by conjoint manipulation the whole region and define both the shape and size of the organ. Compression of the kidney immediately produced a characteristic feeling of faintness and nausea. This is a valuable diagnostic sign. The ready replacement of the kidney upwards to its normal position and its equally rapid return to its abnormal location upon release of pressure, was very characteristic and striking.

Commentary: In Dietl's crisis the patient is seized with sharp agonizing pain and tenderness in the corresponding lumbar and hypochondriac regions. Usually the kidney rapidly enlarges from acute congestion and hydronephrosis, and nausea and vomiting occur. Urinary secretion is diminished and the urine thereafter may be found to contain albumin, casts or blood. An increased flow of urine almost invariably follows the cessation of pain. Between the occurrence of such crises, the urine may be entirely normal. Various subjective symptoms, local and reflex, present in nephroptosis, but the most common and most impressive local symptom is a sensation of weight or dropping, which is noticed after standing or walking for a long period. Again, one frequently finds such a patient unable to lie, without discomfort, on the side opposite the affected kidney. Frequently the patient herself discovers the ptosed organ and recognizes that it is the source of annoyance and pain, and that both its size and position is variable. It is most important to remember that constant pain is rare, but attacks occur from torsion of the pedicle of the kidney, which obstructs the ureter and blood vessels.

One may justly sympathize with Dr. Raymond Balls, in the absence of X-ray aid, in his difficulty of arriving at a final diagnosis. I have rarely seen a case which presented more possibilities, and when one knows the complexity of symptoms, nervous, gastro-intestinal and vesical which present in some cases and the close simulation of lesion in the liver, gall-bladder or appendix in others, one's full sympathy is awakened.

The Operation: Through Edelbohl's incision I exposed a considerably hypertrophied but otherwise normal kidney, and fixed it, following a modification of Brödel's method, using No. 2 chromic catgut. Complete relief from pain and distress immediately followed, and recovery has been uninterrupted. I have urged the advisability of two months' rest in a horizontal position in order to obtain secure union.

The patient has now quite recovered and there has been no return of her pain. The hypertrophied kidney is in excellent position. I am strongly convinced of the great importance of prolonged postural rest after fixation of a movable kidney.

Reviews.

IMPOTENCE AND STERILITY.

There is usually something unsavoury about books on sexual topics. The charlatan has introduced them too often to the inquisitive and morbidly inclined laity, and while physiologists and clinicians recognize the importance of the sexual life of the individual, both are inclined to handle the subject with reticence, because of the difficulty in differentiating between pathological conditions and viciousness. In his book on "The Sexual Disabilities of Man," Dr. Arthur Cooper¹ deals boldly and seriously with the physiology of the sexual life of men, and with the pathology and treatment of sterility, impotence and other forms of sexual disability. The book has reached its third edition in the course of eight years. It contains much information of a trustworthy kind, and some opinions. The sequence of record is chosen deliberately, and he adopts the wise method of allowing physiological knowledge to merge imperceptibly into a discussion of pathological states and of drawing on his own experience in practice as well as on the recorded experiences of others. He addresses the book chiefly to students who become practitioners "with little knowledge of matters which receive but scanty recognition in the medical schools" of Great Britain. The young man embarking in practice will find in it information of a kind which is new to him, but which may be useful. He will gain an insight into the causes of childless marriages other than those affecting the wife. He will be told, by a man who has made it his business to study the medical aspect of the problem, something about the causes of unhappiness in married life, when the male partner is a sexual hypochondriac or when a definite defect is present in his sexual physiology. The book contains some statements with which practitioners of experience may not agree. It does not exhaust a very complex subject, although it may serve as a sound foundation on which to build later.

THE CARE OF CHILDREN BY THE STATE.

Queensland.

The Director of the State Children Department of Queensland has issued his report for the year 1916. The Department has control, directly or indirectly, of thirteen institutions, five of which are administered directly, two are under the control of the Salvation Army, one under the control of the Anglican Sisters, and five under the control of the Roman Catholic Sisters of Mercy. At the beginning of the year there were in these institutions 1,047 children. During the course of the year 938 were admitted and 949 were discharged or died. The total number of inmates at the end of the year was 1,036. A short account is given of the salient events in this connexion at each of the 13 institutions. The largest is the St. Vincent's Orphanage at Rudgee, an institution conducted for the reception of Roman Catholic children by the Roman Catholic Sisters of Mercy. It is beautifully kept, the management is excellent, and the health of the children during the year was satisfactory. There were five deaths among the inmates, who totalled 587. The second largest institution is the Meteor Park Orphanage of Neerkol. This is also a Roman Catholic institution, and is said to be excellently conducted. An epidemic of gastro-enteritis some-

what impaired the health of the children and led to twelve deaths. There were 297 children in the institution during the year.

During the course of the year the total number of children dealt with in the various institutions, other than the industrial and reformatory schools, was 1,705. There were 595 cases of illness among these children. Unfortunately, the classification is too general to enable the reader to ascertain the nature of the processes at work. There were 219 cases of "diseases of digestive system," 57 of "diseases of the nervous system" and 56 of "diseases of the respiratory system." There were 54 affections involving the skin and cellular tissue, dengue appeared 42 times, syphilis 20 times, influenza 20 times and rheumatism but twice. No case of lead poisoning is included in the list.

The State is divided for administrative purpose into three districts, the Southern, the Central and the Northern. In the Southern district there were 3,898 children under the care or supervision of the Department. In the Central District there were 1,046 and in the Northern District there were 820, making 5,764 in all. Of these, 1,036 were in institutions, eight were in hospitals, 873 were boarded out with foster-mothers, 3,101 were boarded out with female relatives, 475 were hired out, 59 were adopted, 211 were released on probation and one was in another institution. During the course of the year, 1,843 children were brought under the care of the Department. Among the many reasons necessitating this course, the most common were as follows. Father dead and mother unable to support; father an invalid, mother unable to support; father deserted, mother unable to support; committed by Bench; illegitimate, mother unable to support; father in gaol, mother unable to support, etc. In twelve instances the father had enlisted and the mother was unable to support her child, and in six the father had enlisted and the mother was dead. Thirteen mothers were unable to support their children while their husbands were interned.

The Act provides that the care of the Department may be exercised until the chargeable is 18 years of age. Under certain circumstances, a girl may be looked after until she is 21. Children boarded out with female relatives pass out of the State control on attaining the age of 13, save in the case of deformity or of permanent ill-health. During the course of the year 59 of the children died. Gastro-intestinal affections were responsible for 21 deaths, while pneumonic conditions, marasmus and diphtheria were not infrequent. There was one death from chronic lead poisoning and two from syphilis.

The officers of the Department have been able to recover from the parents the sum of £6,811 for maintenance. The total expenditure for the year was £123,885, of which £92,123 was spent on boarding-out. The total number of children boarded out with foster-mothers was 873. These children were placed in 228 homes. Great care was exercised in the selection of these homes, and none of doubtful character were licensed. The Board relates that the foster mothers, on the whole, have given satisfaction. In addition, 3,101 children were boarded with their mothers or with their female relatives. It is provided that State children up to the age of 13 may be boarded with their own mothers or female relatives, provided that they are women of good repute. State aid is extended for the maintenance of children to destitute widows, deserted wives, wives of invalids and, at times, wives living apart from their husbands, or to female relatives when both parents are dead, or for other reasons. Rigid enquiries were made in cases in which it was suspected that the financial circumstances of the mothers or relatives had improved. The result of these enquiries led to the discontinuance of the support to 378 families, and to the discharge of 703 children from State control. The saving to the State amounted to £15,223. Experience has been made that once mothers or female relatives are in receipt of State aid for the children, it is very rare for them to volunteer the statement that the aid has become unnecessary.

It is stated that the number of mentally defective and crippled children under the control of the Department has increased. These children are accommodated in foster homes and institutions. It is felt that a special home should be established, in order that they might receive special care and training.

¹The Sexual Disabilities of Man and their Treatment and Prevention, by Arthur Cooper, M.R.C.S., L.R.C.P. Third Edition, Revised and Enlarged; 1916. London: H. K. Lewis & Co., Ltd. Crown 8vo., pp. 227. Price, 6s. net.

The Medical Journal of Australia.

SATURDAY, DECEMBER 8, 1917.

The Need for Men.

In a short time the citizens of Australia will be required to fill in their voting papers. They will be asked to decide a simple question—whether the sons of Empire shall contribute men to the great Army fighting the protagonists of militarism. We have already expressed the opinion that the medical profession will vote solidly in favour of compulsory reinforcement. Events in Queensland have indicated that violence and anarchy are the weapons of those who oppose the proposal. There is but one possible reply to the cowards who defy law and order in an endeavour to bring Australia into irretrievable disgrace. The reply must be an overwhelming majority of affirmative votes. The Victorian Branch has called upon its members to vote in this manner. The resolution has the support of all honourable members of the medical profession throughout the Commonwealth. For the moment we can lay aside our claims for more. At present we must concentrate all our energies on securing a unanimous vote from the profession. There are no valid arguments on the other side. The Empire needs all the men she can put in the field. Our duty to provide them is paramount. Let every medical practitioner in every corner of Australia mark his or her voting paper "Yes."

M. W. ARMIT, 30-34 Elizabeth Street, Sydney.

THE HIPPOCRATIC OATH.

In another column we publish a short report of portion of the proceedings at a Petty Sessions Court at Bourke, at which Dr. L. L. Snow, who was called as a witness for the Crown, refused, in the course of his examination in chief, to answer a question put to him by the Sergeant of Police, who conducted the prosecution. Comment on the position has been delayed, pending the trial of the accused. This has now taken place, and we are free to discuss the facts

and circumstances. Dr. Snow was asked to disclose what is commonly known to medical men as a professional secret. That is to say, he was called upon to divulge what a patient said to him in the course of his professional attendance, and he refused to do so. The magistrate, regardless of the fact that the evidence was hearsay, and consequently inadmissible, committed Dr. Snow to gaol for seven days. He had the power to fine him £2, but for some reason or other he preferred to inflict the penalty of imprisonment. Fortunately, opportunity occurred to invoke the assistance of the Department of the Attorney-General and of Justice, and the Order of His Excellency the Lieutenant-Governor was obtained for Dr. Snow's release "forthwith."

The law governing the question of professional secrecy, as concerning medical men in the witness box in Courts of Law, has been dealt with from time to time in this journal. In the British Empire, with the exception of certain places, a medical witness is not allowed to withhold evidence, otherwise admissible, on the ground that what he is asked to divulge came to his knowledge in the course of his professional attendance upon a patient. The parts of the Empire referred to, where the law is different, are the Dominion of New Zealand, where, it is understood, professional secrets are protected from disclosure in the witness box, both in civil and criminal cases, and the State of Victoria, where the protection is limited to civil cases. It is possible that Dr. Snow misunderstood his position under the law; but perhaps he relied upon the Court using its discretion in the matter, as the higher Courts frequently do. In fact, it is not unusual for a Judge to disallow a question calling for the disclosure of a professional secret, when it is clear to him that no really useful purpose would be served if the answer were given, or where there are reasons why it should not be given. The complication doubtless would not have occurred in Dr. Snow's case, if the accused had been represented by solicitor or counsel; for then the question of the Police Sergeant would most certainly have been objected to in the usual way, and the Magistrate's attention drawn to the fact that, inasmuch as the accused was not present at the conversation between Dr. Snow and his patient, the evidence was "hearsay," and consequently inadmissible. The Magistrate,

however, before requiring the witness to answer, ought to have ascertained whether or not the accused was present. His omission to do so appears to be inexcusable. It is the recognized duty of a presiding magistrate, as it is of a judge, to protect the interests of the accused, especially in cases where the accused has no legal assistance. It is significant to note that, at the subsequent trial of the accused, although Dr. Snow was called by the Crown and his evidence taken, the Crown Prosecutor did not ask the question. While we sympathize with Dr. Snow in his unfortunate predicament, we heartily congratulate him on following the dictates of his conscience, and on his courageous upholding of the principles of the Hippocratic Oath, which, in the interests of the public and the profession, should never be forgotten.

CHARITABLE INSTITUTIONS.

The Honourable David Storey, the Acting Minister of Public Health of New South Wales, pointedly referred to the Sydney Hospital as a charitable institution, on the occasion of the unveiling of the Honour Board the other day. He invited the charitable public to guard most zealously the privilege and sacred duty of providing for the sick poor in the institutions established for this purpose. There are many persons so careless of their honour that they do not hesitate to claim for themselves the advantages provided in the great metropolitan public hospitals, thus depriving the necessitous of the accommodation meant for them. Incidentally, these grasping individuals demand for nothing the services of medical practitioners who have agreed to attend the sick poor in these institutions. This action on the part of well-to-do people constitutes a gross abuse of public charity. It has long been the aim of hospital boards and of the medical profession to combat this abuse by causing judicious enquires to be made into the ability of an applicant for admission into a hospital to pay for the treatment required outside. The Acting Minister for Public Health laid stress on the contributions by the public and set up the thesis that these contributions maintained the charitable character of the hospitals. He might have gone a step further and enunciated the doctrine that a hospital levy for the purpose of maintaining a State-supported hospital dif-

ferentiates the institution as a charitable one, as compared with a hospital made self-supporting by payments of the patients. We have recently pointed out that the Tasmanian hospitals will lose their characters as charitable institutions, if the Hospitals Bill, 1917, becomes law. The provisions of this measure are not even consistent from the point of view of a non-charitable institution. In the first place, the new hospital boards are to take over the funds held by the boards which they supersede. Much of this money has been invested or otherwise held in trust on terms which are quite at variance with the terms on which they will be held and used by the new boards. Moreover, the boards are given power to receive and apply money for the purpose of the "permanent improvement of the hospital or the extension of the objects for which the hospital is established." Public hospitals have been established for the purpose of providing an asylum wherein the necessitous shall be housed and cared for during sickness. The application of money held in trust or otherwise to provide accommodation and medical treatment for persons in affluent circumstances, cannot be regarded as being in accordance with the objects for which the hospital was established. In the next place, the boards are empowered to appoint persons to collect voluntary contributions and donations for sundry purposes connected with the hospitals. It thus appears that the cost of providing house room, treatment and nursing for any person who desires to claim them, is to be defrayed out of funds originally contributed for a totally different purpose, out of funds begged from a beneficent public, under the guise of charity, out of funds granted by the Government for the purpose, and, lastly, out of funds collected from the patients themselves for the purpose of their own maintenance. There is thus a combination of the essentials for a purely charitable institution, the essentials for a quasi-charitable institution, and the essentials for a business venture. The principles are incompatible. It is immaterial to the medical officers of the hospitals whence the money required for the maintenance comes, but it is a matter of fundamental importance that a medical practitioner shall not be exploited by being required to give his knowledge and skill to persons able to pay for this. Under the provisions of the Hospitals Bill, no self-respecting medical prac-

itioner could hold the position of a member of the honorary staff. The misuse of funds collected for charitable purposes establishes this point. If the hospitals are placed under the care of salaried staffs, the public will soon discover the inadvisability of placing their sick in the charge of medical practitioners who have so little concern with the honour and interests of their profession that they are willing to place themselves outside the pale for cheap notoriety and an income.

COMBATING VENEREAL DISEASES IN QUEENSLAND.

The passage of the amendment to the Health Acts of Queensland has led to the introduction of new regulations dealing with the endeavour to control venereal diseases. These regulations have been published in the *Queensland Government Gazette* of November 23, 1917. The first regulation prescribes that venereal diseases, as defined in the Act, shall be notifiable throughout the State of Queensland and also determines the form of notice to be used by medical practitioners. In the succeeding regulations the forms to be employed are prescribed when a change of the medical adviser is undertaken, when the name and address of the patient has to be sent to the Commissioner upon his failure to consult a doctor, and when the doctor certifies that a person is cured of his disease. The sixth regulation is as follows:—

Whenever the Commissioner has received a statement signed by a medical practitioner or other person, in which shall be set forth the full name and address of the informant, that any person (whether male or female) is suffering from venereal disease, and the Commissioner has reason to believe, from evidence disclosed in the said statement, that the person named therein is suffering from such disease, he may give notice in writing in Form F. in the Schedule hereto, to such person requiring such person to consult a specified medical practitioner within a specified time and at a specified place for medical examination by clinical and bacteriological methods, and to produce to the satisfaction of the Commissioner, within a time which shall also be specified in such notice, a certificate of such medical practitioner that such person is or is not suffering from such disease.

Any person, who fails without reasonable excuse to produce such certificate within such specified time shall be liable to a penalty not exceeding twenty pounds.

The form of notice is determined in the following regulation. A special form is designed for the purpose of requiring prostitutes to submit to examination at a place and time determined by a Government Medical Officer or a medical practitioner. In this regulation it is set forth that failure without reasonable excuse on the part of the prostitute to submit herself at the time and place specified in the notice, is punishable by a fine not exceeding £20. In the next regulation it is provided that persons suffering from venereal diseases shall be treated in any hospital which receives a subsidy from the State. The medical officer of the hospital is empowered to determine whether the person shall be treated as an out-patient or in the wards. The

necessary accommodation for indoor patients must be provided. The managers of the hospitals must provide all necessary drugs, instruments and utensils, including an irrigation room, approved by the Commissioner.

In the next place provision is made for the clinical and bacteriological examination of those prisoners who are suspected of being infected with venereal disease. A further regulation prohibits a person who is detained by the order of a police magistrate, the Commissioner or the Governor in Council, under section 161 (2) of the Act, to leave the place of detention. It also forbids others to aid the detained person in leaving the place of detention.

Persons suffering from venereal disease are not allowed to carry, deliver, manufacture, prepare or otherwise handle any food intended for consumption by any other person. Infected persons are required to take all reasonable precautions to prevent the spread of the infection, and are to carry out the instructions of their medical advisers in this connexion. Similarly certain precautions must be taken by the persons in charge of children suffering from venereal disease. A separate bed, separate towels and other toilet requisites shall be provided, the child shall be washed in a separate bath, all soiled clothing shall be disinfected by boiling or other effective means, the child shall be prevented from coming into contact with other children, and the directions of the medical adviser shall be carried out. Finally, the penalty for an offence against the regulations is fixed at a sum not exceeding twenty pounds for each offence.

HYDROCYANIC ACID DESTRUCTION OF LICE.

In *The Medical Journal of Australia*, November 11, 1916, Dr. C. E. Corlette recommended the use of hydrocyanic acid vapour for the purpose of fumigating ships to kill insects, and also of destroying lice in soldiers' clothes. Apparently the reason why this substance has not been used widely for these purposes is to be sought in the fact of its intense toxicity. Recent researches have shown that some of the nitrobenzene derivatives, more particularly xylene, chlorbenzene and brom-benzene, may prove of value in this connexion. Information concerning them is still sparse, and beyond the fact that the derivatives with a low boiling point are especially deadly to certain insects, such as *Musca domestica*, while those with a high boiling point are more toxic to cockroaches, not enough is known to justify a practical adaptation of the facts elicited. On the other hand the information concerning the action of hydrocyanic acid vapour on all forms of life suffices to render its application for fumigation purposes advisable. According to an abstract published in *The Review of Applied Entomology* of September, 1917, E. Teichmann has determined the concentration necessary to kill lice and their eggs during a given time. The article appeared in the *Deutsche Medizinische Wochenschrift* of March 8, 1917. Adult lice, their larvæ and eggs were inevitably killed when exposed to 1 volume % of the vapour for two hours or to 2 volume % for one hour. Further experimentation demonstrated that the lethal effect was obtained when the

product of the volume percentage and the time in hours was two. The vapour proved to have such great penetrating power that lice hiding beneath two pillows and a blanket were killed as certainly and as rapidly as those fully exposed to the free vapour. As Dr. Corlette pointed out, fumigation with hydrocyanic acid vapour can be rendered as safe as fumigation with other substances, although it is not possible to make it quite "fool-proof." Teichmann has arrived at a similar conclusion. If proper care be exercised, the poisonous nature of the vapour need not be a deterrent to its use. In view of the uniformly satisfactory results of the application of this substance for the purpose of killing insects and vermin under divers conditions, its general employment would appear to be highly desirable.

THE EFFECT OF INCREASED INTRAPERICARDIAL PRESSURE.

The fact that an increase of pressure in the pericardial cavity leads to a diminution of the aortic blood-pressure has been long known. This diminution has been ascribed to obstruction to the supply of venous blood to the heart and to interference with the flow of blood into the auricle during diastole. Yas Kuno¹ has made some experiments at Mukden to obtain further information as to the pathological conditions and to devise means of coping with hydropericardium. He has introduced different amounts of Ringer's solution into the pericardial sac of dogs and measured the intrapericardial pressure, the output of the heart per minute and the aortic blood pressure. The introduction of small quantities of fluid, such as five cubic centimetres, lessens the flow from the heart, though the pericardial pressure is little raised and the arterial blood-pressure is not affected. With further additions of fluid to the pericardial cavity the output of the heart is regularly diminished. The arterial pressure is hardly lessened until the quantity of fluid in the pericardial bag reaches a moderate amount. Further additions of fluid to the pericardial cavity rapidly lower the aortic blood-pressure. The height of the intrapericardial pressure, which brings the circulation to a standstill, is exactly the same as the venous blood-pressure. If the venous pressure is raised, the circulation of the blood is recommenced. It is not possible to raise the venous blood-pressure by injecting fluid into the veins. Even the trans-fusion of blood produces no venous engorgement nor dilatation of the right atrium. The administration of adrenalin not only gives rise to a heightened aortic blood-pressure, but causes the heart to expel more blood than before the employment of the vaso-constrictor. This substance appears to benefit the condition of hydropericardium by increasing the venous blood-pressure and by lessening the volume of the heart. As a consequence of these changes the intrapericardial pressure is lowered and the obstruction to the entrance of blood into the right auricle from the great veins removed to some extent. The influence of adrenalin is most pronounced when the quantity of fluid in the pericardial sac has produced a

fall of arterial blood-pressure of 40 or 50 mm. Hg. Under these conditions the administration of a small dose of adrenalin will restore the arterial blood-pressure to its normal level and render the heart-beats regular. Even when the amount of fluid in the pericardium is sufficient to lower the aortic blood-pressure to one-quarter the normal height, a dose of adrenalin will so benefit the output of the heart that the circulation becomes almost normal. It is desirable that these experimental conclusions should be extended by clinical records of the use of adrenalin in cases of hydropericardium.

We regret to record the death of Dr. William Kelty, of Sydney, which took place on November 27. Dr. Kelty was returning from England via Canada.

Public Health.

NEW SOUTH WALES.

The following notifications have been received by the Department of Public Health, New South Wales, during the week ending November 24, 1917:—

	Metropolitan District.		Hunter River District.		Rest of State.		Total.	
	Cs.	Dths.	Cs.	Dths.	Cs.	Dths.	Cs.	Dths.
Enteric Fever ..	6	0	1	0	9	2	16	2
Scarlatina ..	20	0	2	0	10	1	32	1
Diphtheria ..	51	0	0	0	15	1	66	1
C'bro-Spl. Menin.	1	0	0	0	1	0	2	0
Poliomyelitis ..	1	0	0	0	0	0	1	0
*Pul. Tuberculosis	18	4	0	0	0	0	18	4

* Notifiable only in the Metropolitan and Hunter River Districts, and, since October 2, 1916, in the Blue Mountain Shire and Katoomba Municipality.

VICTORIA.

The following notifications have been received by the Department of Public Health, Victoria, during the week ending November 25, 1917:—

	Metropolitan.		Rest of State.		Total.	
	Cs.	Dths.	Cs.	Dths.	Cs.	Dths.
Diphtheria ..	49	0	21	0	70	0
Scarlatina ..	36	0	18	0	54	0
Enteric Fever ..	2	0	5	0	7	0
Pulmonary Tuberculosis	16	4	8	8	24	12
C'bro-Spl. Meningitis	0	—	1	—	1	—
Poliomyelitis ..	3	—	0	—	3	—

SOUTH AUSTRALIA.

The following notifications have been received by the Central Board of Health, Adelaide, during the week ending November 17, 1917:—

	Adelaide.		Rest of State.		Totals.	
	Cs.	Dths.	Cs.	Dths.	Cs.	Dths.
Diphtheria ..	5	0	18	1	23	1
Pulmonary Tuberculosis	0	3	7	5	7	8
Pertussis ..	0	0	6	0	6	0
Scarlatina ..	1	0	4	0	5	0
Erysipelas ..	1	0	1	0	2	0
Morbili ..	0	0	2	0	2	0
Enteric Fever ..	0	0	1	0	1	0

WESTERN AUSTRALIA.

The following notifications have been received by the Department of Public Health, Western Australia, during the three weeks ending November 17, 1917:—

	Metropolitan.		Rest of State.		Totals.	
	Cases.	Cases.	Cases.	Cases.	Cases.	Cases.
Enteric Fever ..	2	..	6	..	8	..
Diphtheria ..	31	..	20	..	51	..
Scarlatina ..	8	..	4	..	12	..
Pulmonary Tuberculosis	21	..	6	..	27	..
Erysipelas ..	3	..	1	..	4	..
Beri Beri ..	0	..	2	..	2	..
Cerebro-spinal Meningitis	2	..	0	..	2	..
Puerperal Fever ..	2	..	0	..	2	..

¹ Journ. of Physiology, Vol. II., p. 221, September, 1917.

QUEENSLAND.

The following notifications have been received by the Department of Public Health, Queensland, during the week ending November 24, 1917:—

Disease.	No. of Cases.
Diphtheria	25
Enteric Fever	15
Pulmonary Tuberculosis	15
Scarlatina	1
Erysipelas	3

TASMANIA.

The following notifications have been received by the Department of Public Health, Tasmania, during the week ending November 24, 1917:—

Disease.	Hobart. Cases.	Launceston. Cases.	Country. Cases.	Whole State. Cases.
Diphtheria	2	3	7	12
Pulmonary Tuberculosis	1	0	6	7
C'bro-Spl. Meningitis	1	0	0	1
Scarlatina	0	0	5	5
Pollomyelitis	0	0	1	1
Enteric Fever	0	0	1	1

INFECTIVE DISEASES.

The Quarantine Department have issued the following information in connexion with the distribution of infective diseases in three Bulletins dated October 26, November 9, and November 23, 1917—

Variola.

During the period from October 12 to November 20, 1917, six cases of variola have been notified in New South Wales. In the Dutch East Indies there were 53 cases and four deaths since the publication of the last report. From the beginning of September until October 22, 1917, there were 12 cases notified in the Straits Settlements and one death. A bill of health from Zamboanga, Philippine Islands, gives information concerning 22 cases during the fortnight ending October 13, 1917. There were nine cases of variola in Manila between August 18 and October 13, 1917.

Plague.

The number of cases of plague reported in India between August 19 and September 22, 1917, was 31,438. In the same period there were 23,085 deaths. In Java there were 20 cases with 19 deaths, between December 10 and the end of the month. There were five cases with two deaths in the Straits Settlements between October 8 and November 20, 1917. Two cases were reported in Ceylon between August 26 and October 23. In Hawaii (Hamakua district) two fatal cases occurred during the first few days of September. The last case of rat plague was noted at Paaulo on October 21.

Cholera.

During the period from August 20 to October 8, 1917, there were 1,285 cases of cholera with 855 deaths. In the Dutch East Indies information concerning 42 cases and five deaths has been received since the issue of the last Bulletin. There were two fatal cases from the Straits Settlements during the first three weeks of October.

Typhus Fever.

The following information dealing with the incidence of typhus fever is culled from the reports of the United States Public Health Service, and deals with the period between August 18 and September 21, 1917.

Place.	Cases.	Deaths.
Mexico	445	—
Egypt	316	120
Java	144	12
Japan	23	2
Russia	20	2
China	7	2
Norway	6	—
Switzerland	5	1
Netherlands	5	—
Algeria	1	1
Brazil	1	—
Greece	—	10

Three cases have occurred in New York City during July and the first part of August.

It is announced that a very extensive outbreak of typhus fever is raging in 15 districts in South Africa. The most active centres are the Transkei and Border districts, and the principal town affected is Queenstown. The majority of cases have occurred among the native population. A few Europeans have been attacked. Up to the beginning of October about 2,000 cases have been reported with 400 deaths. Dr. J. A. Mitchell, Medical Officer of Health to the Union of South Africa, has expressed the opinion that the disease has become endemic in the neighbourhood of Queenstown and East London. He regards the matter as a serious one for the natives of the whole of South Africa. He has pointed out that in many cases a more or less completely positive Widal reaction has been obtained with the blood of the patients.

Medico-Legal.

On October 19, 1917, Mr. S. J. Hamblin, Police Magistrate, heard a case in which a man was charged with an offence against his own daughter, a child aged 14 years and 11 months, at the Bourke Police Court. The prosecution was undertaken by Sergeant Lean, on behalf of the police; the prisoner was not represented.

In the course of the hearing, Dr. L. L. Snow was examined as a witness. Sergeant Lean asked him:—

During your conversation with the girl, did she make any accusation against any person?

Dr. Snow declined to answer the question. The Magistrate enquired the grounds for his refusal, and Dr. Snow said:—

On the grounds of professional secrecy. I have written to a professional man and am acting on his advice.

The Magistrate asked for the name of his friend, but Dr. Snow stated that he had promised not to divulge it. The Magistrate asked whether he could produce the letter of advice and Dr. Snow stated that he had destroyed it.

The Magistrate said:—

Rather an extraordinary thing to do. If you thought it so important that you had to get advice on the question, you surely would not destroy it. I must come to one of two conclusions: either you did not write the letter or, if you did, you did not destroy the reply.

Dr. Snow said:—

I did write the letter: I got a reply and destroyed it.

The Magistrate:—

Well, I must take your word. The question is a fair and reasonable one, and should be answered.

He read legal authorities showing that doctors and ministers were not exempt from replying to questions in a criminal case. He suggested that Dr. Snow would not wish to pit himself against the law. He knew of nothing in the rules of the British Medical Association that would prevent him from answering such a question. His answer might be the means of freeing an innocent man, or of condemning a guilty one. If Dr. Snow refused to answer the question, he would have to do his duty and to commit him. He did not wish to offer him any such indignity, and would therefore adjourn the Court for an hour, in order that he might reconsider his position.

When the Court resumed, Dr. Snow intimated that he still refused to reply to the question.

The Magistrate said:—

You have no lawful standing in refusing to answer the question, but if you wish to make a martyr of yourself, you must take the consequences. I have already quoted the law to you. I will be pleased to listen to any reasonable excuse why you should not answer the question.

Dr. Snow declined to answer the question, and the Magistrate committed him to gaol for seven days.

Representations were immediately made in Sydney to the Minister for Justice, and an Order was issued on October 22 by His Excellency the Lieutenant-Governor for the release from custody of Dr. Snow.

At first, Dr. Snow was incarcerated in an ordinary prison cell. As he was the only medical man in the town, he was allowed to attend urgent cases, but was accompanied by a constable.

Abstracts from Current Medical Literature.

MEDICINE.

(198) Serum Treatment for Poliomyelitis.

J. W. Nuzum and R. G. Willy (*Journ. Amer. Med. Assoc.*, October 13, 1917) have treated 159 patients suffering from epidemic anterior poliomyelitis with an immune serum derived from a horse. The immunization was effected by means of the Gram-positive coccus from the central nervous system of poliomyelitic patients. The serum is said to be potent, the activity having been measured in regard to agglutinins, complement fixation bodies and opsonin. Of the patients treated in this manner, 19 died, which is equal to a mortality of 11.9%. The mortality among 100 patients not treated by serum was 38%. Seven of the patients treated by serum were admitted with developed signs of respiratory paralysis. The authors consider that if adequate precautions are taken to free the serum from hæmoglobin, to render it sterile without the addition of antiseptics and to apply it with caution, its harmlessness is assured. From their experience in cases in which no paralysis had developed at the time the treatment was instituted, they conclude that the serum has the power of preventing the development of paralysis. When paralysis already exists, it appears to check its spread and to lessen its severity, but it does not always cause its disappearance. The serum effects a critical fall in the temperature, and is followed by a definite improvement of the clinical symptoms. They have applied it both intravenously and intraspinally. The dose by the former route is from 10 to 30 c.cm., and by the latter 5 to 10 c.cm. From their account of the preparation of the serum, it would appear that the agglutination titre was 1 in 5,000 and the point of opsonic extinction 1 in 6,144.

(199) Achylia Gastrica and Connective Tissue Lienteria.

N. W. Jones has attempted to analyse the clinical manifestations of chronic gastric achylia and chronic connective tissue lienteria, with a view to the determination of the factors giving rise to these conditions (*North-West Medicine*, October, 1917). At the same time he has attempted to establish principles for successful treatment. His series comprised 245 patients, 132 being described as possessing an asthenic form of structure, and 113 broad frames. Signs of general asthenia, however, were present in 182 of the patients. Chronic intestinal symptoms had been present from childhood in those patients in whom the asthenia was severe and general. Among the more robust patients there were toxic symptoms, including headache and pains in muscles and joints, in addition to the gastro-intestinal symptoms. Gastrogenic dysentery was common in this group. In the cases of

achylia constipation was usually present, and was associated with gastric motility of four hours or longer. Four out of five cases of chronic dysentery were associated with a too rapid emptying of the stomach. The stomach appears to be tonic or atonic, according to whether the patient is suffering from general asthenia or not. The treatment of achylia and of diarrhoea characterized by the presence of undigested connective tissue in the stools, depends largely on the exclusion of connective tissue as long as the symptoms continue, and a rebuilding of the body in the asthenic type. Thorough preliminary cooking of vegetables and mechanical division of all food frequently suffice to overcome the defect. In the asthenic form a complete regulation of the gastro-intestinal tract can be effected by diet alone. Means must be taken to supply fat, and physical training should be employed for the purpose of remoulding the body by increasing the capacity of the upper part of the abdomen, developing the chest, overcoming postural defects, etc., and by using up the excess of nutrient material. A new body habit has to be established, and the author points out that until this habit has become fixed, there is always a tendency to relapse. Hydrochloric acid may be required in some cases, although it apparently does harm in others. Abstinence from meat is necessary during the period of treatment, and in some cases has to be permanent.

(200) Intermittent Claudication.

F. Parkes Weber describes the case of a man aged 45, a Russian Polish Hebrew, furnishing a typical illustration of the early stage of thromboangiitis obliterans, as it occurs in London among the Hebrew immigrants from Poland and the neighbouring parts of Europe (*Proc. Royal Soc. Med.*, March, 1917). The intermittent claudication commenced seven months before. A painful stiffness in the calf muscles of the affected extremity (the right leg) came on whenever the patient walked for any considerable distance, and obliged him to rest for 2 or 3 minutes, until it passed off. Thus, if he wished to continue his walk for a long time, he had to rest every 20 or 30 minutes owing to the pain. Afterwards the intermittent claudication somewhat increased, so that the pain occurred sooner, and the pauses (that is to say the "claudications") were repeated more frequently, i.e., with rather shorter intervals. For two months, however, he was troubled by pain of another kind, which almost prevented his walking, namely, "ischaemic pain" in the distal portion of the right foot, which for about the same period had been red or cyanotic when in a dependent position. This kind of pain, being worse at night, prevented the patient from sleeping unless drugs were administered. The right foot presented the group of symptoms called "erythromelalgia." This symptom-group consists of pain in an extremity accompanied by redness

and lividity, whenever the limb was allowed to hang down, and occurs in conditions of arterial obstruction—syphilitic, traumatic and degenerative arterio-sclerotic obstructions. The patient in question was a nervous-looking man of moderate general nutrition. The distal part of the right foot was intensely cyanosed unless raised and kept warm. The redness and cyanosis were temporarily diminished if the ankle-joint were forcibly flexed and extended several times. Good pulsation was to be felt in the left *dorsalis pedis*, but not in the right. Good pulsation could be felt in the femoral artery at the groin on both sides. There was a slight wasting in the calf muscles of the right side. No formation of "ischaemic" ulcers on the affected foot. Beyond *pyorrhoea alveolaris* no evidence of any other disease could be found. The brachial systolic blood-pressure was rather high—about 160 mm. Hg. There was no history of venereal disease, and the complement deviation test was negative. Treatment: rest in bed, local warmth by hot air baths, induction of passive hyperaemia in the affected limb by Bier's apparatus, iodide of potassium and opiates as required for pain and insomnia.

(201) Exophthalmic Goitre.

J. H. Means and J. C. Aub, of the Massachusetts General Hospital, give an exhaustive account of experiments in connexion with exophthalmic goitre (*Journ. Amer. Med. Assoc.*, July 7, 1917). They state that the manifestations of over-activity of the thyroid gland are numerous. Besides tachycardia, nervousness, loss of weight, and tendency to increased sweating, a rise in the general heat production, or, as it is now generally called, the basal metabolism, practically always occurs. Moreover, while a rise may be likewise found in a few other pathological conditions, it is less marked, and is found in conditions easily differentiated from hyperthyroidism. It is fair to say that a rise in the basal metabolism is not only a constant feature, but is one of the most striking and characteristic manifestations of thyroid over-activity. The authors' conclusions are:—1. The general metabolism shows a characteristic increase in hyperthyroidism. 2. This rise may be used as a functional test of the thyroid activity or as an index of the intensity of the thyroid intoxication. 3. An extended study of the metabolism in various types of toxic goitre show that: (a) Rest alone usually causes a marked decrease in toxicity. (b) Drugs in addition to rest do not materially accelerate this decrease. (c) Roentgen rays, in some cases, produce a definite improvement, while, in others, they seem to be quite without effect. (d) The usual immediate effect of surgery is a marked decrease in toxicity, but there is a very definite tendency towards a subsequent recurrence. 4. The therapeutic lessons from these results are: (a) Complete rest in bed and

irradiation should be continued till the metabolism is definitely raised. (b) If rest and the Röntgen rays fail to restore the metabolism to within 20% of the normal, it is proper to resort to surgery, unless there is some definite contra-indication. Among contra-indications a rising metabolism, in spite of complete rest, seems to be very important. (c) Following operation, if the metabolism again increases, further active treatment should be carried out. The importance is emphasized of keeping patients with exophthalmic goitre under observation for months rather than weeks, and preferably years rather than months.

NEUROLOGY.

(202) Experimental Toxi-infection of the Central Nervous System.

Orra and Rows (*Brain, Part I. Vol. 40, May, 1917*) have previously drawn attention to the difference between lymphogenous and hematogenous infection. They induced the first by infecting the ascending lymph stream of nerves, the second by placing celluloid capsules containing a culture of bacteria in the abdominal cavity, and they showed that the lymphogenous lesion was essentially inflammatory, the hematogenous lesion essentially non-inflammatory. They concluded that general paralysis and tabes dorsalis were lymphogenous infections and the non-systemic changes found in cancer cachexia, pernicious anemia and Addison's disease, hematogenous infections. In those experiments results were studied in the spinal cord only. The present research was directed towards the brain. The capsules containing *staphylococcus aureus* were placed in contact with the common carotid artery in the neck. Rabbits were used and two types of lesion observed: (1) Coagulation necrosis of nerve cells in the *cornu ammonis*, cerebral cortex and amygdaloid nucleus, (2) softening in the *stratum moleculare* of the *cornu ammonis*. After describing the lesions in detail, they made the important remarks that the above-mentioned areas and no others were the seat of change, that these areas were supplied by cortical vessels derived from the pia-arachnoid, and that the lesions agreed histologically with those seen in the spinal cord after infection of the abdominal cavity. Practically applied, they thought the experiments elucidated the genesis of certain infantile cerebropathies now regarded as the outcome of toxi-infections during fetal life or early infancy. Such lesions varied in range from aberrations in type of gyri or sulci to absence of the *corpus callosum* and on to porencephaly or even absence of one hemisphere.

(203) The Origin of Mental Power.

Redfield (*Journ. of Mental Science, LXIII., January, 1917*) disagreed with the teaching of ordinary biology that the inheritance of the child was not affected by the education of the parent,

Examination of the results of the education of men, in schools, of horses, on the race track and of sporting dogs, in the fields, showed that from generation to generation there came improvement in both mental and physical power, further, that whenever education in any generation fell below a certain minimum, the next generation showed declension. The acquired effects of long-continued education could only be shown in older persons. But these provided a definite test of the matter under discussion. Because if the effects of education were transmitted from father to son, then great men must come from parents who were above the average age of parents (for fatherhood 32 years) when the average child was born. Now from an examination of the ancestries of 860 eminent men, it was found that the standard age of the father was 40 years. Each increase, within physiological limits, in the age of the father at birth of the son increased the son's chances of becoming eminent. Sub-normal and feeble-minded men—not idiot or insane—came from the low end of the scale, being produced by uneducated persons usually under 20 when those children were born. To sterilize, to segregate, or to transport the sub-normal in the hope of improving the race was futile. It was only necessary to force education upon and prevent individuals from marrying until they had reached their majority. So in two generations sub-normal stock might be raised to normality.

(204) Psychiatric Family Studies.

Myerson (*Amer. Journ. Insanity, 1917, LXXIII.*) in a paper of 130 pages, studied heredity in relation to insanity. He first criticized Koller and Diem's finding that the insane were only slightly more tainted than the non-insane, by saying that their statistics were vitiated by the inclusion of the eccentric, psychopathic and peculiar among the normal. He next considered the marriage rate in forbears of the insane, and found that in the alcoholic, paretic and dementia precox groups males married less than females, while in senile cases the marriages of the sexes were equal. In the dementia precox group there was a decided deficiency of married females. Dementia precox, therefore, would seem to operate against self-perpetuation. Concerning "anticipation or antedating" the author's figures agreed with those of Mott. Thus, of the 22,300 patients admitted to the Taunton State Hospital from 1854 to 1916, there were 1,547 related to one another, representing 663 families. The mother-son relation was much less frequent than the mother-daughter (as 55 to 80), while the father-son relation approximated the father-daughter (as 55 to 59). The following main conclusions were reached: Paranoid ancestors beget dementia precox or paranoid states. Dementia precox bred dementia precox, mingled with epilepsy, and moral or ordinary imbecility. Manic-depressive insanity bred the same

form, but dementia precox might arise. Dementia precox also followed the involution psychoses. "It will thus be seen that all roads lead to dementia precox, and thence to imbecility."

(205) War Injuries to the Musculo-Spiral Nerve.

Warrington and Nelson (*Liverpool Med. Chir. Journ., 1916, XXXVI.*) discussed eighteen cases of injury to the musculo-spiral nerve, and summarized the treatment of cases in which there was complete loss of function, thus: (1) For three months the hand and fingers should be supported on a light, cocked-up splint, the muscles being massaged and galvanized and the joints passively moved daily. (2) If, at the end of this period, there were signs of recovery, the same treatment should be persisted in and the patient encouraged to attempt voluntary movement. (3) If, on the other hand, no recovery was apparent, the nerve should be explored and given operative attention, with the usual precautions. (4) After such operation, postural fixation, massage and passive movement were still urgently required. (5) If, six or eight months after the operation, no sign of voluntary movement were discernible, tendon transplantation should be considered. (6) If the first examination of the nerve were not made until eight months or more after receipt of the injury, and complete loss of function existed, the prognosis as regards neuro-muscular recovery was doubtful and again tendon transplantation should be considered.

(206) A Test for Recovery in Musculo-Spiral Paralysis.

Halipré (*Rev. Neurol., Nos. 2-3, 1917*) pointed out that, after the wrist-drop of musculo-spiral paralysis had in course of recovery passed off and movements of normal amplitude been regained, there might still remain a lack of energy in these movements, proclaiming imperfect recovery. To discover this he suggested a test which he called "the sign of the flexors." The patient was asked to stretch his arms forward, with the hands palm downwards, as in the position of blessing, and then take hold of the hands of the observer and exert prehensile force. On the normal side this act would occasion slight hyperextension of the wrist. On the affected side it would immediately cause the wrist to drop. The extensors, which had been sufficiently strong to hold the hand in the position of blessing, gave way the moment the antagonistic flexors came into action. Therefore, proof of functional recovery from musculo-spiral paralysis, as in all kinds of paralysis, called for two postulates. (1) Ability to execute movements of normal amplitude. (2) Ability to execute these movements with sufficient energy. The attitude of blessing (Pitre's sign) gave information concerning the amplitude of movement, "the sign of the flexors" gave information concerning real functional capacity.

MEDICAL INSPECTION OF SCHOOL CHILDREN IN TASMANIA.

The Minister of Education of Tasmania has issued his report for the year 1916, and devotes 23 lines to medical and dental inspection. Fifteen of these 26 lines are occupied by a summary of the work undertaken in the dental clinics which were established during the year in Hobart and Launceston. In the paragraph dealing with medical inspection he states that two full-time and two part-time medical officers and two school nurses are employed at the Department.

Extracts from the reports of the medical officers are published as an appendix. In view of the immense importance of good health to the individual during childhood and of the dependence of the mental functions on the integrity of the bodily functions, it appears to us that 2¾ pages out of a total of 50 is too small a proportion to devote to this subject. We notice with regret that the Department prefers to waste money on the reproduction of indifferent photographs of the Dental Clinic, which cannot conceivably serve any useful purpose. The money spent on these pictures would have been put to better service, had it been devoted to the reproduction of the complete reports of the medical officers of the Department.

Southern District.

Dr. Ethel M. Hawkins, the Medical Inspector for the Southern District, visited 116 schools during the year. These included 105 State schools, eight convent schools and three private schools. The number of children examined medically was 4,128, and dentally, 6,012. Adenoid vegetations were found in 427 children, i.e., 10.34% of those examined. In the majority of cases the condition was severe enough to necessitate treatment. There were 103 children with enlarged tonsils, which is equivalent to 2.47%. Many of these children were suffering also from adenoid vegetation. Defective vision, by which is meant a vision less than $\frac{6}{6}$ in one or both eyes, or a smaller defect associated with symptoms of eye strain, was discovered in 80 children. This is equivalent to 1.93%. In addition, 23 children had strabismus, nystagmus, corneal opacity or the loss of an eye. There were 144 cases of deafness, which is equivalent to 3.48% of those examined. The test for deafness employed was the watch test. Dr. Hawkins calls attention to the fact that, in the cases of younger children, this is not as reliable as the whisper test. There were eight cases of otorrhoea. There were 63 of goitre—a strikingly large proportion. In the abstract printed no comment is made on the frequency of this condition. There were 36 cases of defective speech, the majority of which were instances of stuttering. Only eight children of the 4,128 examined had pediculosis. Dr. Hawkins is to be congratulated on the tangible results of the measures adopted by her for improving the cleanliness of the children. Of 13 cases of scabies, seven were discovered in one district. A few other skin affections were also met with. There were 25 cases of anæmia, the cause of which, however, is not given.

Pertussis occurred at ten schools, morbilli at nine, scarlatina at eight, diphtheria at two and varicella at two, parotitis at one and enteric fever.

Dr. Hawkins gives a satisfactory account of the lighting and ventilation of the schools visited by her. In some cases the ventilation is not up to modern requirements, but in all new buildings this and the system of lighting have had a satisfactory amount of attention. In advocating a system of "following up," she points out that relatively few children receive treatment as a result of the notices urging that steps be taken to remedy the defects discovered at the inspection. It is not infrequent that parents promise to seek medical advice and fail to keep their promises.

Brief reference is given to the Conference of School Medical Officers, held in Sydney in December, 1916.

Of the children examined dentally, 4,360 were found to be in need of some form of dental treatment. This represents 72.3% of the total number examined. The parents of these children were informed of the condition of the teeth.

Northern District.

Dr. M. J. Moffatt, Medical Inspector for the Northern District, visited 93 schools, and examined 4,582 children. Special visits were paid to five schools, on account of epidemics of

diphtheria and scarlet fever. The practice followed at the inspection is that a notice is sent by Dr. Moffatt to the parents when defects which are regarded to be sufficiently serious to interfere with the child's physical welfare or educational progress. A stethoscopic examination of the chest is carried out when there is reason to suspect the presence of pulmonary or cardiac affection. Defective vision was found in 127 children, which represents 2.7% of those examined. Several children were found to be wearing glasses which had been ordered without a thorough medical examination of the eye having been carried out. There were 21 cases of strabisms, two cases of corectopia and two of nystagmus. There were also 99 cases of blepharitis and four of ptosis. Deafness was discovered in 37 children. This represents less than 0.8% of those examined. There were five cases of otorrhoea. Enlargement of the tonsils was found 241 times, i.e., 5.2%, and adenoid vegetations 121 times, i.e., 2.6%. Dr. Moffatt had occasion to notify the parents of 30 children on account of a marked degree of anæmia. In the same number of children there was a chronic enlargement of the thyroid gland.

She points out that only about 2% of the children had perfectly healthy mouths. The dental inspection is carried out in Launceston, East Launceston, Ivermay, Glen Dhu and the Deloraine district.

In conclusion, complaint is made of the fact that some teachers persistently ignore the principles of hygiene, and notwithstanding adequate provision for proper ventilation, allow the atmosphere in the school room to become very impure. Another serious error frequently committed is that of allowing children to work in a strong front light.

Hobart.

Dr. A. H. Clarke, part-time Medical Officer for Hobart, records that he examined during the course of the year 1,850 children, of whom 1,750 were new scholars. Physical defects liable to interfere with educational progress was discovered in 581, or 31.4% of those examined. There were 127 eye defects, 16 cases of otorrhoea and deafness, 225 of adenoid vegetations, five of heart disease, 11 of enlargement of the thyroid gland, and four of pulmonary tuberculosis. There was but one case of ringworm, and no case of scabies. Several isolated cases of diphtheria occurred among the Hobart school children, but the spread of the disease was prevented by the systematic search for carriers, and their prompt exclusion from school when discovered.

At one school the head teacher initiated breathing exercises for the children. Dr. Clarke states that the results have been most satisfactory, and that, in the vast majority of the children, a good development of the chest has resulted.

He gives an encouraging report of progress made by the pupils at a school for backward children. The success is entirely due to an excellent teacher whose heart is in her work.

The dental clinic, which was started during the year, has provided treatment for a large number of children. Dr. Clarke is convinced that it will have a beneficial effect on their general health. It was found necessary for the school nurse to devote a considerable amount of time to the preliminary work of the clinic. This resulted in a temporary interference with her routine work. In the course of the year she paid 425 visits to the homes of the children, with the result that treatment was obtained for 335 defects out of a total of 471. In addition, she obtained a promise that treatment would be instituted in 83 cases. The treatment was postponed in three cases, while in ten the children had left the neighbourhood. It will be admitted that this result is highly satisfactory, and is a complete reply to those who urge that the duty of providing treatment must be accepted by the Education Department.

Launceston.

Dr. G. H. Hogg, part-time Medical Officer for the Launceston District, unfortunately gives no statistics in his summarized report. He states that the health of the children, on the whole, has been good. There was a very marked improvement in the cleanliness of the children. Mild epidemics of morbilli and pertussis occurred during the year, in addition to a few cases of diphtheria. In regard

to the school buildings, it is gratifying to note that one of the worst types has been rebuilt and is now satisfactory from a hygienic point of view.

Dr. Hogg devotes a paragraph to the praise of the Dental Clinic, which was instituted in Launceston during the year. He is convinced that its value will be immeasurable, and speaks most highly of the dental surgeon in charge, who is not only a most capable officer, but is also one of the kindest and most sympathetic of men. He expresses his gratitude to the head-masters of the various schools, and to the school nurse, for their valuable assistance. The school nurse visited the homes of 1,173 children. The number of children found by the Inspector to be physically defective and requiring treatment was 597. Treatment was obtained in 449 cases. In 10 it was postponed, and in 11 cases the children were awaiting treatment. In only one case was treatment definitely refused. The value of "following up" by a competent school nurse is strikingly demonstrated in this record.

Hospitals.

THE ADELAIDE HOSPITAL.

The 47th Annual Report of the Board of Management of the Adelaide Hospital, dealing with the year 1916, is an attractive little volume containing 25 pages of letterpress and numerous reproductions of photographs of different parts of the Institution. The following information is contained in the Report proper and in the appendices.

During the course of the year the number of patients admitted into the Hospital was 4,861. In 1914 5,013 new patients were admitted, and in 1915 the number was 4,636. The growth of the institution is seen in a table containing details from the year 1870. The number of admissions was then 1,203, and has increased more or less steadily up to the present time. Three thousand was reached for the first time in 1898, and 4,000 in 1912. No information is given in regard to the number of patients in the Hospital on the first day of the year. The general mortality is given at 7.75%. The number of deaths in 1916 was 377. In the year under review, the number of deaths represented 7.7% of the number of admissions. In 1870 the proportion was 8%, in 1880 it was 6.6%, in 1890 it was 9.4%, in 1900 it was 8%, and in 1910 it was 8.8%. While the relative frequency of death has apparently varied but little during the course of 46 years, the duration of illness, as revealed by the average length of residence in the Hospital, has diminished by approximately one-half. In 1870 the average length of stay in Hospital was 43 days, in 1871 it was 40, and in 1872 it was 38. In 1914, 1915 and 1916, it was 20, 21 and 20 respectively. The cost per patient has also undergone very considerable alteration. In 1870 the annual cost of each patient was £46 9s. 2½d. In 1916 it was £109 10s. 2d. Between 1870 and 1910 the increase was gradual, the lowest figure in this period being £43 19s. 4½d. (1881) and the highest £77 16s. 10d. (1910). During the past six years the increase has been much more formidable.

The total expenditure for the year amounted to £36,857. This sum was met by the patients' fees and subscribers' contributions, amounting to close on £2,000, sales and sundries aggregating over £550, students' fees to the value of £123, and a sum representing 10% of the donations of life contributors, amounting to £212. The remainder of the income, *viz.*, £33,938, is paid by the Government, as the Adelaide Hospital is a Government institution.

In the Consumptives' Home persons suffering from pulmonary tuberculosis and malignant disease receive treatment. The total number of admissions during the year was 175, including 128 tubercular patients and 47 cancer patients. Of the former, 92 died, and of the latter 35. The case mortality among the tubercular patients was 73%, and among the cancer patients 76.9%. In the infectious diseases block 705 patients were admitted. The number of persons discharged was 632, and of those who died 73. The gross case mortality was therefore 10.35%. There were 86 cases of cerebro-spinal meningitis, including one complicated with measles and one complicated with diphtheria. The mortality was 43%, or, if the complicated cases

be excluded, 42.8%. There were 99 cases of measles, including 13 complicated cases. Only one death occurred. There were 34 cases of scarlet fever, without a death, and 32 of pertussis, with seven deaths. There were 347 cases of diphtheria, with 25 deaths, which yields a case mortality of 7.2%. Six cases of enteric fever were treated, and one patient died. In addition to the patients admitted to the infectious diseases ward, there were 80 other cases treated in the Hospital wards. As 12 of the 86 patients died, the case mortality for enteric fever was 14%.

During the course of the year a few changes were effected in the medical staff. Dr. J. B. Gunson resigned his position as Honorary Assistant Physician, and was succeeded by Dr. F. S. Hone. Dr. W. Ray resigned his position as Honorary Assistant Physician in the Infectious Diseases Block, but was later appointed Assistant Physician in the same Department. Drs. C. Duguid and R. J. Verco acted as temporary Honorary Assistant Physicians during the absence of the permanent Assistant Physicians, who are on war service. Dr. A. M. Cudmore, Dr. Bronte Smeaton, Dr. A. W. Hill, Dr. H. F. Shorney and Dr. Helen Mayo were reappointed for a further period of three years. It appears that no fresh permanent appointments are being made to the position on the staff of the Hospital during the currency of the war.

A night clinic for the treatment of venereal diseases has been established for three months. All persons who are not in a position to pay for outside medical attendance are eligible for treatment in this Department. The Clinic is in the charge of Dr. H. Rischbieth (Honorary Surgeon), who is assisted by fifth-year students. Treatment is accorded until the patients are returned to health and are no longer a source of danger to others. The number of patients under treatment during the three months was 174.

A sub-committee, consisting of the Inspector-General of Hospitals, Dr. Cudmore, Dr. Todd, the Superintendent of Public Buildings and the Chairman of the Board of Management of the Adelaide Hospital, was appointed by the Chief Secretary to enquire into the question of improved and additional accommodation at the Adelaide Hospital. The sub-committee met on ten occasions. They have recommended the erection of new Out-patient, Casualty and Admission Departments, with all necessary accommodation, including consultation rooms, operating theatre, X-ray department, resident medical officers' quarters, nurses' quarters and accommodation for students, and have intimated that they would consider the question of the best method of dealing with the main building of the Hospital at a later date. The recommendations are now being considered.

The work conducted in the Laboratory of Bacteriology and Pathology has been considerably increased from that of the previous years. A large number of examinations has been carried out for the Adelaide Hospital, for the military authority, for various Boards of Health and for private practitioners. A short account of the work is given in an appendix. The total expenditure of the Department amounted to £1,562, and the fees received for work carried out to £1,428. In the Vaccine Department no less than 3,654 doses of meningococcus vaccine were prepared for the military.

Naval and Military.

CASUALTIES.

The last five casualty lists issued to the public contain 5,303 names. In the 361st list, issued on November 30, 1917, it is recorded that Major Norman John Bullen was killed in action (see *The Medical Journal of Australia*, November 24, 1917, page 444). In the 362nd list the announcement that Captain Eric John Kerr was killed in action is repeated (see *The Medical Journal of Australia*, November 10, 1917, page 405, and November 24, 1917, page 444). It is further recorded that Captain Stuart Galloway Gibson has been wounded (gas), that Major John Bernard Francis McKenzie has been wounded, and that Major Wallace Mervyn Alfred Fletcher has been wounded, but is remaining on duty. Major Edward Patrick McDonnell is reported to be ill.

APPOINTMENTS.

The following appointments and promotions are announced in the *Commonwealth of Australia Gazette*, No. 206, of November 29, 1917:—

Army Medical Corps.

Major (temporary Lieutenant-Colonel) R. D. Campbell, D.S.O., to command No. 3 Casualty Clearing Station, and to retain temporary rank of Lieutenant-Colonel whilst commanding, 6th July, 1917.

Captain N. M. Gibson, 1st Australian Divisional Hospital, to be Registrar, and is granted the temporary rank of Major whilst so employed, 13th June, 1917.

To be Honorary Colonel—

Lieutenant-Colonel (temporary Colonel) G. Cusaden, V.D., Australian Army Medical Corps.

To be Honorary Lieutenant-Colonels—

Major J. C. Morton, Australian Army Medical Corps, and Honorary Major (temporary Lieutenant-Colonel) A. Honnan, Australian Army Medical Corps Reserve.

To be Honorary Major—

Honorary Captain C. H. Johnson, Australian Army Medical Corps Reserve.

Obituary.

GLADSTONE MONTAGUE HUNT.

Gladstone Montague Hunt, whose death on active service was announced in this Journal in October, was born in Sydney on October 13, 1889. In early life it appears that he suffered a mild attack of anterior poliomyelitis, which left in its trail some paresis of the leg muscles sufficient to handicap him in athletic competition with his school comrades, but not sufficient to prevent him from playing a prominent part in the colossal game of war. He was educated at the Sydney High School, where he obtained a three years' scholarship. In 1906 he passed his senior examination and proceeded immediately to the Sydney University. At the Medical School he was a popular and a successful student, and his facility in learning awakened envy in many of his comrades. He obtained his degree in medicine in 1911, and in the following year claimed the degree of Master of Surgery. After graduating, he took a resident appointment at the hospital at Goulburn, and later did private practice and hospital work at Forsyth in Queensland. In April, 1913, he returned to New South Wales and started in practice at Candelo. During the following two years he laid a sound foundation for successful practice. Early in 1915, however, he offered his services to the Department of Defence, and on May 20 of that year he received a commission in the Army Medical Service. Six days later he left Australia in charge of a transport. After having carried out his duties on the transport, he was drafted to Egypt and served at Heliopolis, Mena, and at the Ras-el-tin Convalescent Home. The period of service at each place could not have been long, as he was sent to Gallipoli and remained there for a considerable portion of the occupation of the Peninsula. After the evacuation he was sent with the First Field Ambulance to France, where he distinguished himself by his splendid behaviour. In the early part of the present year he was awarded the Military Cross for conspicuous gallantry and devotion to duty. "He showed an absolute disregard of danger, and set a splendid example to his stretcher-bearers, working with them over ground continually swept by heavy fire. He worked for six consecutive weeks in a forward area in charge of an advanced dressing station." (See *The Medical Journal of Australia*, September 1, 1917, page 195). On June 20, 1917, he was promoted to the rank of Major. No information has yet been received concerning the circumstances of his death. His letters from the front reveal a cheery optimism and a laudable desire to spare those near and dear to him all avoidable anxiety.

WILLIAM DOUGLAS BUCHANAN YUILLE.

We have to record the death of William Douglas Buchanan Yuille, which took place on September 1, 1917, in Perth. Although he had only been in Western Aus-

tralia for a short time, his death has caused widespread regret among his colleagues, friends and patients.

William Douglas Buchanan Yuille was a member of a well-known Victorian family. He was born in 1878, and spent his childhood in Melbourne. After leaving school, he entered the Melbourne University, but later took up his medical course in Edinburgh. In 1904 he obtained the diplomas of the Royal Colleges of Physicians and Surgeons of Edinburgh. Returning to Australia, he settled at Williamstown, Victoria, and held the position of medical officer at the General Hospital and of Health Officer. He left Williamstown in 1910. He then served for a time as Surgeon in the Royal Australian Navy. On returning to Edinburgh, he became first Resident Gynaecologist, and later Resident Surgeon at the Royal Infirmary. In 1915 he obtained the Fellowship of the Royal College of Surgeons, of Edinburgh. About the same time he acted as assistant to Major Harold J. Stiles at one of the military hospitals in Edinburgh. He was subsequently appointed Consulting Surgeon to the Fourth Southern General Military Hospital in Devonport. At the end of 1916 he left Great Britain, and in February, 1917, took over the practice in Perth of the late Dr. Harold Teague, who was killed in action on March 17, 1917. He was appointed Honorary Assistant Surgeon to the Children's Hospital. During the last nine months of his life he was a member of the Western Australian Branch of the British Medical Association, and won the golden opinions of his colleagues. He leaves a widow and three children, to whom much sympathy is expressed in their sad loss.

Special Correspondence.

(By Our Special Correspondent.)

CANADA LETTER.

Returned Soldiers Suffering from Tuberculosis.

A conference of medical officers in charge of sanatoria in which returned soldiers are undergoing treatment, took place at Ottawa in June, 1917, when a number of points concerning methods of administration and treatment were discussed, and an advisory committee was appointed to assist the Military Hospitals' Commission in the provision of care and treatment of tuberculous soldiers, both those who have been overseas and those who have developed the disease during the period of preliminary training in Canada.

Cases have occurred in which a man has refused treatment and has signed a form releasing the Government of responsibility towards him, but later has come back to ask for treatment. It was decided that every leniency should be shown such men, and that they should be admitted to sanatoria and allowed to re-attest and thus receive the usual pay and allowances. Several cases had also occurred where men had been granted total disability pensions and then been permitted to enter civilian sanatoria; this was considered inadvisable, since the total disability pension amounted to more than the usual pay, and advantage might be taken by the men of such an arrangement. Difficulties in connexion with discipline have been found to arise when officers and men have been treated in the same institution; it was recommended, therefore, that they should be sent to separate hospitals. It was also recommended that a central institution should be established for chronic cases of tuberculosis, and that incorrigibles should be sent to a detention sanatorium where discipline could be enforced more rigidly.

As to the number of patients to be treated by one medical officer, it was thought that no doctor should be expected to attend to more than fifty patients and that for each additional forty men, or less, a medical officer should be provided. It was understood, however, that the physician should be responsible for medical treatment only and should not be burdened with other duties.

It was pointed out that in recommending a man, upon his return to Canada, for treatment for tuberculosis, no definite period of time should be mentioned by the medical board, as, if, for instance, the man were told that he would be given six months' treatment, he expected to be cured at the end

of that time, and it had been found difficult in some cases to discipline the patient when the stated time was up. It would be better, therefore, if the medical boards would refrain from stating any period of time. It was considered advisable to permit the man to visit his people before entering a sanatorium, as otherwise he would be dissatisfied and, in some cases had refused to go to the sanatorium at all. The danger of conveying infection was not great, since most of the cases had already been treated in England and the disease was in a quiescent state. The question of holiday leave was also discussed, and it was recommended that the men should be permitted to go home either just before or shortly after the festival season, but not, for instance, at Christmas-time, as at such a time they were likely to get too much to eat and drink and to suffer from the crowded trains, etc. If the reason for this was explained to the men there would be no difficulty. A resolution was passed unanimously that it be made a penal offence for anyone to supply a tuberculous soldier with intoxicating drink.

Great emphasis was laid upon the value of occupation as an aid to discipline and a promoter of rapid improvement. Even patients in bed could do fancy work. It relieved their mind of worry and kept them interested in something apart from themselves and their illness, and the little exhibitions of their work that they got up for their friends, gave them both interest and pleasure.

Venereal Disease.

The question of venereal disease has assumed a greater importance in view of the return of members of the Expeditionary Force at the conclusion of the war. The whole subject was discussed in the Public Health Section of the Academy of Medicine, Toronto, some months ago, when a committee was appointed to consider the question. It was resolved that, whereas the problem of venereal disease which recent investigations had shown to be widespread in Canada, had not received consideration commensurate with its importance, the Academy of Medicine urge upon the proper authorities that the following action be taken to combat the menace:—

- I. That an educational campaign be actively carried on by:
 - (a) The provincial board of health;
 - (b) The universities and medical schools providing more adequate teaching of the subjects of syphilis and gonorrhoea;
 - (c) The medical faculties of the various universities and medical colleges throwing open their lectures and clinics on venereal disease to practitioners of medicine;
 - (d) The teaching of the subject of venereal disease to the general students of the universities.
- II. (a) That all general hospitals situated in cities and receiving Government aid shall provide or arrange for the diagnosis and treatment of venereal disease;
- (b) That all standards of laboratory diagnosis be under the control and direction of the Provincial Board of Health;
- (c) That the province be divided into districts, each to be served by a laboratory or laboratories designated by the Provincial Board of Health for this purpose;
- (d) That the Provincial Government be asked to set aside \$10,000, to be administered by the Provincial Board of Health, for remuneration of services and equipment in conducting these laboratories.

The Committee afterwards waited upon the Government of Ontario, which received the recommendations sympathetically, and granted the sum of \$10,000 for the initiation of the work.

Correspondence.

LONGEVITY AFTER VAGINAL HYSTERECTOMY.

Sir,—In the review in your issue of November 17 of Dr. Doyen's "Surgical Therapeutics and Operative Technique" occurs the sentence: "And this apart from the fact that for years past it has been demonstrated that vaginal hys-

terectomy can scarcely ever be justified." The following results should be interesting: Quite recently I have heard of the after history of two cases in which I performed vaginal hysterectomy—(1) in 1897 for primary sarcoma of body of uterus, (2) in 1900 for cancer of the cervix of the uterus. Both patients are alive and well. The clinical diagnosis in each case was substantiated by independent microscopical examinations.

Another case of cancer of cervix, also done in 1900, was alive and well 12 years after the operation, but since then I have not heard of the patient.

Doubtless other surgeons have had equally happy experiences. Shock is much less in vaginal than in abdominal hysterectomy.

Yours, etc.,

LEONARD W. BICKLE, F.R.C.S. Edin.

Sydney, November 19, 1917.

Sir,—I fear that Dr. Leonard W. Bickle fails to appreciate the fundamental difference in principle between "radical" operation for *carcinoma uteri* and the "vaginal" operation. I quite agree with him that there are many instances of permanent cure after a "vaginal hysterectomy" done for *carcinoma uteri*. These were cases in which the cancerous invasion was absolutely limited within the zone of operation. Can Dr. Bickle differentiate before operation between such cases and those—probably 40% of the operable cases—in which the pelvic lymphatic vessels and glands are already invaded by cancerous elements; cases in which there is no possible hope of ultimate freedom from so-called "recurrence," if the "vaginal" operation is done? I use the expression "so-called recurrence" because the condition which is usually so designated, is not a recurrence. The state of malignant infection of the broad ligament, lymphatic vessels and pelvic glands exists at the time of the original operation, and is not included in the actual operation area. Hence what is usually termed recurrence is merely the spread of cancer elements which are already outside the limit of the tissue removed.

The principle which underlies the "radical" operation for *carcinoma uteri*, is the same as that which is now generally accepted in dealing with carcinoma in any region of the body, i.e., remove the whole of the affected organ, together with its efferent lymphatic vessels and, at the least, the nearest group of lymphatic glands into which the efferent vessels lead.

The "shock" which follows a "radical" operation is often greater than that following the minor procedure, but in the vast majority of cases it can be satisfactorily dealt with. The proportion of permanent cures after the "radical" operation is far greater than after the "vaginal" operation, and the relative mortality in skilled hands is little, if at all, greater.

With reference to Dr. Bickle's case of *sarcoma uteri*, one can only say that it has no bearing upon the question at issue. I would again repeat most emphatically "that vaginal hysterectomy can scarcely ever be justified," and I might amplify it by adding: "either for malignant new growth, or dislocation of the uterus."

THE REVIEWER OF THE BOOK.

THE MEDICAL PROFESSION AND THE LODGES.

Sir,—Now that the Council of the Victorian Branch has furnished the public with an official statement, the latter will be able to see the justice of the claims of the profession, and that the Council has not treated the Friendly Societies' representatives with any discourtesy. That being so, the medical profession is in a much better position than it has been; but the main question—the only one worth considering—still remains, is this the right time? However just the demands are, discord must be created by such a matter; if discord tends to the loss of any votes for conscription, as it is sure to do, then a great wrong is being done the country.

In connexion with other medical men in Melbourne, I found that there is a feeling of regret that the matter has gone so far as notice of resignation. If a referendum were taken among the profession on the definite question, "Are you in favour of all lodge appointments being resigned at present?" I am sure there would be a large vote against. The referendum that was taken, so far as I remember the

wording, merely tested the loyalty of members to the Council.

Considering the urgency of the time—the taking of a conscription referendum—and the position of the profession having been clearly set before the public, the Council should now withdraw all resignations. This action in itself would win votes for conscription, and would enable members to work harder in the campaign, and would be a worthy act after the Council has just passed a resolution in favour of the Government proposals.

Trusting the Council will act in this direction,

Yours, etc.,
F. R. LEGGE.

Swan Hill, Victoria,
November 26, 1917.

Books Received.

ELEMENTARY HYGIENE FOR NURSES, by H. C. Rutherford Darling, M.D., M.S., F.R.C.S., F.R.F.P.S., with 13 illustrations; 1917. London: J. and A. Churchill. Sydney: Angus and Robertson; Richard Thomson, Crown St., pp. 152. Price, 4s.
DAYS OF PROBATION, by Louise Gerard; 1917. London: Mills and Boon, Limited. Sydney: Angus and Robertson. Crown St., pp. 312. Price, 4s.

Medical Appointments.

Dr. H. W. D. Stoddart (B.M.A.) has been appointed Deputy Quarantine Officer, Wallaroo, South Australia. The appointment dates from November 5, 1917.

Dr. T. Davies has been appointed Quarantine Officer at Darwin, Northern Territory.

Dr. James Sprent (B.M.A.) has been elected by the Senate of the University of Tasmania as a Member of the Council of the University for the three years ending December 31, 1919.

Medical Appointments Vacant, etc.

For announcements of medical appointments vacant, assistants, locum tenentes sought, etc., see "Advertiser," page xvii.

Cue-Day Dawn Hospital, Medical Officer.

Medical Appointments.

IMPORTANT NOTICE.

Medical practitioners are requested not to apply for any appointment referred to in the following table, without having first communicated with the Honorary Secretary of the Branch named in the first column, or with the Medical Secretary of the British Medical Association, 429 Strand, London, W.C.

Branch.	APPOINTMENTS.
TASMANIA.	
Hon. Sec., Bel- rive, Tasmania.)	Medical Officers in all State-aided Hospitals in Tasmania.
VICTORIA.	
(Hon. Sec., Medi- cal Society Hall, East Melbourne.)	Brunswick Medical Institute. Bendigo Medical Institute. Prahran United F.S. Dispensary. Australian Prudential Association Pro- prietary, Limited. National Provident Association. Life Insurance Company of Australia, Limited. Mutual National Provident Club.

Branch.	APPOINTMENTS.
QUEENSLAND.	
(Hon. Sec., B.M.A. Building, Ade- laide Street, Bris- bane.)	Medical Officers to the Selwyn Hos- pital, North Queensland. Brisbane United Friendly Society In- stitute.
SOUTH AUS- TRALIA.	
(Hon. Sec., 3 North Terrace, Adelaide.)	The F.S. Medical Assoc., Incorp., Adelaide. Contract Practice, Appointments at Renmark.
WESTERN AUS- TRALIA.	
(Hon. Sec., Health Department, Perth.)	All Contract Practice Appointments in Western Australia.
NEW SOUTH WALES.	
(Hon. Sec., 30-34 Elizabeth Street, Sydney.)	Australian Natives' Association. Balmain United F.S. Dispensary. Canterbury United F.S. Dispensary. Leichhardt and Petersham Dispensary. M.U. Oddfellows' Med. Inst., Elizabeth Street, Sydney. Marrickville United F.S. Dispensary. N.S.W. Ambulance Association and Transport Brigade. North Sydney United F.S. People's Prudential Benefit Society. Phoenix Mutual Provident Society. F.S. Lodges at Casino. F.S. Lodges at Lithgow. F.S. Lodges at Parramatta, Penrith, Auburn and Lidcombe. Newcastle Collieries — Killingworth, Seaham Nos. 1 and 2, West Wall- send.
NEW ZEALAND: WELLINGTON DIVISION.	
(Hon. Sec., Wel- lington.)	Friendly Society Lodges, Wellington. N.Z.

Diary for the Month.

- Dec. 11.—Tas. Branch, B.M.A., Council and Branch.
Dec. 11.—N.S.W. Branch, B.M.A., Executive and Finance
Committee.
Dec. 12.—South Sydney Med. Assoc. (N.S.W.).
Dec. 13.—Vict. Branch, B.M.A., Council.
Dec. 14.—S. Aust. Branch, B.M.A., Council.
Dec. 14.—N.S.W. Branch, B.M.A., Branch.
Dec. 18.—N.S.W. Branch, B.M.A., Medical Politics Com-
mittee; Organization and Science Committee.
Dec. 20.—City Medical Association (Sydney, N.S.W.).
Dec. 21.—Q. Branch, B.M.A., Council.
Jan. 8.—N.S.W. Branch, B.M.A., Council (Quarterly).
Jan. 15.—Tas Branch, B.M.A., Council and Annual Meeting.
Jan. 15.—N.S.W. Branch, B.M.A., Ethics Committee.
Jan. 17.—Vic. Branch, B.M.A., Council.

EDITORIAL NOTICES.

Manuscripts forwarded to the office of this Journal cannot under any circumstances be returned.

Original articles forwarded for publication are understood to be offered to *The Medical Journal of Australia* alone, unless the contrary be stated.

All communications should be addressed to "The Editor," *The Medical Journal of Australia*, B.M.A. Building, 30-34 Elizabeth Street, Sydney, New South Wales.